# SUBJECT INDEX

### Acoustic detection

- Assessing Damage in Corroded Reinforced Concrete
  Using Acoustic Emission, Dong-Jin Yoon, W. Jason
  Weiss and Surendra P. Shah, EM Mar. 00, p273-283.
- P-Wave Arrival Determination and AE Characterization of Concrete, Zongjin Li, Faming Li, Xiang-Song Li and Wenlong Yang, EM Feb. 00, p194-200.

P-Wave Arrival Determination and AE Characterization of Concrete, Zongjin Li, Faming Li, Xiang-Song Li and Wenlong Yang, EM Feb. 00, p194-200.

- Active Pulse Structural Control Using Artificial Neural Networks, Shih-Lin Hung, C. Y. Kao and J. C. Lee, EM Aug. 00, p839-849.
- Closed Loop Predictive Optimal Control Algorithm Using ARMA Models, Ali Keyhani and Mehter Mohamed Allam, EM June 00, p620-625.
- Abdolreza Joghataie and Ardalan Vahidi, EM June 00, p582-587. Designing a General Neurocontroller for Water Towers.
- Nonlinear Sliding Mode Control of Seismic Response of Building Frames, S. Sarbjeet and T. K. Datta, EM Apr. 00, p340-347.
- Semiactive Control Strategies for MR Dampers: Compar-ative Study, Laura M. Jansen and Shirley J. Dyke, EM Aug. 00, p795-803.

### Adaptive systems

tegrated Procedure for Identification and Control of MDOF Structures, Vincenzo Gattulli and Francesco Romeo, EM July 00, p730-737.

Alkali-Silica Reaction of Concretes with Admixtures of Concrete, Zongjing Li, Bin Mu and Jun Peng, EM Mar, 00, p243-249.

### Aerodynamics

- Aerodynamic Coupling Effects on Flutter and Buffeting of Bridges, Xinzhong Chen, Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p17-26.
- Time Domain Flutter and Buffeting Response Analysis of Bridges, Xinzhong Chen, Masaru Matsumoto and Ah-san Kareem, EM Jan. 00, p7-16.

# Aggregate gradation

Effect of Aggregate Size on Attenuation of Rayleigh Sur-face Waves in Cement-Based Materials, Laurence J. Jacobs and Joseph O. Owino, EM Nov. 00, p1124-

- Modeling of Early-Age Creep of Shotcrete. I: Model and Model Parameters, Jérôme Sercombe, Christian Hellmich, Franz-Josef Ulm and Herbert Mang, EM Mar. 00, p284-291.
- Modeling of Early-Age Creep of Shotcrete. II: Applica-tion to Tunneling, Christian Hellmich, Jérôme Ser-combe, Franz-Josef Ulm and Herbert Mang, EM Mar. 00, p.292-299.

# Algorithms

- Microplane Model M4 for Concrete. II: Algorithm and Calibration, Ferhun C. Caner and Zdeněk P. Bažant, EM Sept. 00, p954-961.
- Semiactive Control Strategies for MR Dampers: Comparative Study, Laura M. Jansen and Shirley J. Dyke, EM Aug. 00, p795-803.
- Simulation of Stochastic Wind Velocity Field on Long-Span Bridges, Yinghong Cao, Haifan Xiang and Ying Zhou, EM Jan. 00, p1-6.
- Unified Approach to Probabilistic and Possibilistic Anal-ysis of Uncertain Systems, R. S. Langley, EM Nov. 00,

Alkali-Silica Reaction of Concretes with Admixtures of Concrete, Zongjing Li, Bin Mu and Jun Peng, EM Mar. 00, p243-249.

- Conditional Simulation of a Class of Nonstationar Space-Time Random Fields, E. Heredia-Zavoni and S. Santa-Cruz, EM Apr. 00, p.398-404.
- Modeling Interactive Buckling of Plate Structures Using Special Elements, Srinivasan Sridharan and Madjid Zeggane, EM Dec. 00, p1247-1256.

# Analysis

- Analytical Description of Multidegree Bilinear Hysteretic System, Naser Mostaghel and Ryan A. Byrd, EM June 00, p588-598.
- Water Migration Phenomenon in Concrete in Postpeak Region, Hideki Oshita and Tada-aki Tanabe, EM June 00, p573-581.
- Water Migration Phenomenon in Concrete in Prepeak Region, Hideki Oshita and Tada-aki Tanabe, EM June 00, p565-572.

### Analytical techniques

- Analytical Solution for Plane Trusses with Equidistant Supports, C. W. Cai, H. C. Chan and J. K. Liu, EM Apr. 00, p333-339.
- Phase Space Reduction in Stochastic Dynamics, M. Vas-ta and G. I. Schuëller, EM June 00, p626-632.

Pullout Response of a Smooth Fiber with an End Anchorage, C. Sujivorakul, A. M. Waas and A. E. Naaman, EM Sept. 00, p986-993.

## Anisotropic soils

- Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. I: Theory, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1012-1019.
- Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1020-1026.

# Anisotropy

Torsional Surface Waves in Nonhomogeneous Aniso-tropic Medium under Initial Stress, S. Dey, A. K. Gup-ta, S. Gupta and A. M. Prasad, EM Nov. 00, p1120-1123.

### Approximation methods

- Buckling of Long Orthotropic Plates Including Higher-Order Transverse Shear, Ulf Nyman and Per Johan Gustafsson, EM Dec. 00, p1209-1215.
- New Point Estimates for Probability Moments, Yan-Gang Zhao and Tetsuro Ono, EM Apr. 00, p433-436.

Modal Analysis of Linear Asymmetric Nonconservative Systems, Sondipon Adhikari, EM Dec. 99, p1372-

# Asymptotic series

Three-Dimensional Elasticity Solutions of Laminated Annular Spherical Shells, Chih-Ping Wu and Jyh-Yeuan Lo, EM Aug. 00, p882-885.

# Auto-regressive moving-average model

Closed Loop Predictive Optimal Control Algorithm Using ARMA Models, Ali Keyhani and Mehter Mohamed Allam, EM June 00, p620-625.

- Buckling Analysis of Angle-Ply Multilaminated Long Hollow Cylinders, Jianqiao Ye, EM Aug. 99, p964-969.
- Vibration of Vehicle on Compressed Rail on Viscoelastic Foundation, D. Y. Zheng, F. T. K. Au and Y. K. Cheung, EM Nov. 00, p1141-1147.

Second-Order Axial Deflections of Imperfect 3D Beam-Column, J. Darío Aristizabal-Ochoa, EM Nov. 00, p1201-1208.

Axisymmetric Wrinkling of Cylinders with Finite Strain, Ralf Peek, EM May 00, p455-461.

Unsymmetrically Loaded Cylindrical Tank on Elastic Foundation, Moon-Hee Nam and Kwan-Hee Lee, EM Dec. 00, p1257-1261.

Trapping and Generation of Waves by Vertical Porous Structures, T. Sahoo, M. M. Lee and A. T. Chwang, EM Oct. 00, p1074-1082.

# Bayesian analysis

Bayesian Probabilistic Approach to Structural Health Monitoring, M. W. Vanik, J. L. Beck and S. K. Au, EM July 00, p738-745,

### Beam columns

- Multicomponent Model of Reinforced Concrete Joints for Cyclic Loading, F. Fleury, J.-M. Reynouard and O. Merabet, EM Aug. 00, p804-811.
- Second-Order Axial Deflections of Imperfect 3D Beam-Column, J. Dario Aristizabal-Ochoa, EM Nov. 00, p1201-1208.

### Reams

- Bridle Sling Lifting of Elastic Beam, C. Y. Wang, EM Nov. 00, p1198-1200.
- Chemo-Mechanical Effects in Mortar Beams Subjected to Water Hydrolysis, C. Le Bellégo, B. Gérard and G. Pijaudier-Cabot, EM Mar. 00, p266-272.
- Closed-Form Solution for Reinforced Timoshenko Beam on Elastic Foundation, Jian-Hua Yin, EM Aug. 00,
- Damage Detection in Beam Structures Based on Frequency Measurements, Fabrizio Vestroni and Danilo Capecchi, EM July 00, p761-768.
- Direct Numerical Procedure for Solution of Moving Oscillator Problems, B. Yang, C. A. Tan and L. A. Bergman, EM May 00, p462-469.
- Elastic-Plastic Model of Pinned Beams Subjected to Impulsive Loading, M. K. Boutros, EM Sept. 00, p920-927.
- High-Accuracy Analysis of Beams of Bimodulus Materials, Toshiaki Iwase and Ken-ichi Hirashima, EM Feb. 00, p149-156.
- Plastic Deformations of Impulsively Loaded, Rigid-Plastic Beams, Michelle S. Hoo Fatt, Yi Liu and Z. Brandon Wang, EM Feb. 00, p157-165.
- Symmetry of Tangent Stiffness Matrices of 3D Elastic Frame, Lip H. Teh and Murray J. Clarke, EM Feb. 99, p248-251.
- Transient Dynamics of Stochastically Parametered Beams, Sondipon Adhikari and C. S. Manohar, EM Nov. 00, p1131-1140.

Dynamic Response of Soft Poroelastic Bed to Nonlinear Water Wave— Boundary Layer Correction Approach, P. C. Hsieh, L. H. Huang and T. W. Wang, EM Oct. 00, p1064-1073.

- Asymmetric Collapse Modes of Pipes under Combined Bending and External Pressure, E. Corona and S. Kyriakides, EM Dec. 00, p1232-1239.
- Bending of Sector Plates on Elastic Foundations by Bessel Functions, You-He Zhou, Jianping Zhang and Xiao Jing Zheng, EM June 00, p633-655.
  Bending Solutions of Sectorial Mindlin Plates from Kirchhoff Plates, C. M. Wang and G. T. Lim, EM Apr. 00, 2327-237.
- p367-372.
- Bridle Sling Lifting of Elastic Beam, C. Y. Wang, EM Nov. 00, p1198-1200.
- General Thin Rod Model for Preslip Bending Respon of Strand, S. Sathikh, S. Rajasekaran, Jayakumar and C. Jaberaj, EM Feb. 00, p132-139.
- High-Accuracy Analysis of Beams of Bimodulus Materials, Toshiaki Iwase and Ken-ichi Hirashima, EM Feb. 00, p149-156.
- Study of Edge-Zone Equation of Mindlin-Reissner Plate Theory, Asghar Nosier, Arash Yavari and Shahram Sarkani, EM June 00, p647-651.
- Three-Dimensional Elasticity Solutions of Laminated Annular Spherical Shells, Chih-Ping Wu and Jyh-Yeuan Lo, EM Aug. 00, p882-885.

# **Bending moments**

- Green's Functions of Think Plate Bending Problem under Fixed Boundary, Norio Hasebe and Xian-Feng Wang, EM Feb. 00, p206-213.
- Second-Order Axial Deflections of Imperfect 3D Beam-Column, J. Darío Aristizabal-Ochoa, EM Nov. 00, p1201-1208.

# Bends, hydraulic

Three-Dimensional Mean Velocity Analysis of a 30 Degree Bend Flow, Ferdous Ahmed, EM Dec. 00, p1262-1272.

# Bifurcations

- Axisymmetric Wrinkling of Cylinders with Finite Strain, Ralf Peek, EM May 00, p455-461.
- Tracing Secondary Equilibrium Paths of Elastic Framed Structures, Lip H. Teh and Murray J. Clarke, EM Dec. 99, p1358-1364.

### Bilinear analysis

Equivalent Viscous Damping for Bilinear Hysteretic Oscillator, C. K. Reddy and R. Pratap, EM Nov. 00, p1189-1196.

### Blast loads

Elastic-Plastic Model of Pinned Beams Subjected to Impulsive Loading, M. K. Boutros, EM Sept. 00, p920-927.

### Bonding

- Debonding and Calibration Shift of Optical Fiber Sensors in Concrete, Christopher K. Y. Leung, Xinyang Wang and Noah Olson, EM Mar. 00, p300-307.
- Green's Function for Mixed Boundary Value Problem of Thin Plate, Xian-Feng Wang and Norio Hasebe, EM Aug. 00, p787-794.
- Multicomponent Model of Reinforced Concrete Joints for Cyclic Loading, F. Fleury, J.-M. Reynouard and O. Merabet, EM Aug. 00, p804-811.
- Thermoelastic Stability of Two Bonded Half Planes, Derek T. Schade, Kevin Oditt and Dale G. Karr, P.E., EM Sept, 00, p981-985.

### Roundaries

Grain Boundary Migration in Metals: Thermodynamics, Kinetics, Applications by G. Gottstein and L. S. Shvindlerman, George Z. Voyaidjis, EM Aug. 00,

# **Boundary conditions**

- Adjoint Sensitivity Analysis for Shallow-Water Wave Control, Brett F. Sanders and Nikolaos D. Katopodes, EM Sept. 00, p909-919.
- Derivative of Buckling Load with Respect to Support Locations, Zhong-Sheng Liu, Hai-Chang Hu and Cheng Huang, EM June 00, p559-564.
- Generalized Differential Quadrature for Frequency of Rotating Multilayered Conical Shell, Khin-Yong Lam and Li Hua, EM Nov. 00, p1156-1162.
- Green's Functions of Think Plate Bending Problem under Fixed Boundary, Norio Hasebe and Xian-Feng Wang, EM Feb. 00, p206-213.
- Stretches of Fluid Materials for Stokes Flows in Circular Cavity, Tzong-Yih Hwu, EM May 00, p554-557.
- Study of Edge-Zone Equation of Mindlin-Reissner Plate Theory, Asghar Nosier, Arash Yavari and Shahram Sarkani, EM June 00, p647-651.

# Boundary element method

- BIEM Modeling of 3D Circulation and Transport in Stra-tified Estuaries, D. L. Young, B. C. Her and T. I. Eldho, EM Oct. 00, p1083-1092.
- Boundary Integral Equations for Solids and Fluids by Marc Bonnet, George D. Manolis, EM Jan. 00, p120-
- Multidomain SFBEM and Its Application in Elastic Plane Problems, Cheng Su and Dajian Han, EM Oct. 00, p1057-1063.

# Boundary layer

- Dynamic Response of Soft Poroelastic Bed to Nonlinear Water Wave— Boundary Layer Correction Approach, P. C. Hsieh, L. H. Huang and T. W. Wang, EM Oct. 00, p1064-1073.
- Three-Dimensional Mean Velocity Analysis of a 30 Degree Bend Flow, Ferdous Ahmed, EM Dec. 00, p1262-1272

# **Boundary value problems**

Green's Function for Mixed Boundary Value Problem of Thin Plate, Xian-Feng Wang and Norio Hasebe, EM Aug. 00, p787-794.

Perforated Wall Breakwater with Internal Horizontal Plate, T. L. Yip and Allen T. Chwang, EM May 00, p533-538.

Observations on Flow around Bridge Abutment, Ferdous Ahmed and N. Rajaratnam, EM Jan. 00, p51-59.

- Direct Numerical Procedure for Solution of Moving Os-cillator Problems, B. Yang, C. A. Tan and L. A. Berg-man, EM May 00, p462-469.
- Nonlinear Static Procedure for Fragility Curve Develop-ment, Masanobu Shinozuka, Maria Q. Feng, Ho-Kyung Kim and Sang-Hoon Kim, EM Dec. 00, p1287-1295.
- Statistical Analysis of Fragility Curves, Masanobu Shino-zuka, M. Q. Feng, Jongheon Lee and Toshihilo Naganuma, EM Dec. 00, p1224-1231.

# Bridges, box girder

Shear Lag of Thin-Walled Curved Box Girder Bridges. Q. Z. Luo and Q. S. Li, EM Oct. 00, p1111-1114.

- Aerodynamic Coupling Effects on Flutter and Buffeting of Bridges, Xinzhong Chen, Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p17-26.
- Simulation of Stochastic Wind Velocity Field on Long Span Bridges, Yinghong Cao, Haifan Xiang and Ying Zhou, EM Jan. 00, p1-6.
- Time Domain Flutter and Buffeting Response Analysis of Bridges, Xinzhong Chen, Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p7-16.

Nonlinear Static Procedure for Fragility Curve Develop-ment, Masanobu Shinozuka, Maria Q. Feng, Ho-Kyung Kim and Sang-Hoon Kim, EM Dec. 00, p1287-1295.

# Buckling

- Axisymmetric Wrinkling of Cylinders with Finite Strain, Ralf Peek, EM May 00, p455-461.
- Buckling Analysis of Angle-Ply Multilaminated Long Hollow Cylinders, Jianqiao Ye, EM Aug. 99, p964-
- Buckling of Delaminated Composite Beams with Shear Deformation Effect, Izhak Sheinman and Yeoshua Frostig, EM Nov. 00, p1148-1155.
- Buckling of Long Orthotropic Plates Including Higher-Order Transverse Shear, Ulf Nyman and Per Johan Gustafsson, EM Dec. 00, p1209-1215.
- Dela:nination Buckling and Growth in Rings under Pressure, Sami El-Sayed and Srinivasan Sridharan, EM Oct. 00, p1033-1039.
- Derivative of Buckling Load with Respect to Support Lo-cations, Zhong-Sheng Liu, Hai-Chang Hu and Cheng Huang, EM June 00, p559-564.
- Instability of Thin Pipes Encased in Oval Rigid Cavity, Abdel-Aziz M. Omara, P.E., Leslie K. Guice, P.E., W. Thomas Straughan, P.E. and Fred Akl, P.E., EM Apr.
- Modeling Interactive Buckling of Plate Structures Using Special Elements, Srinivasan Sridharan and Madjid Zeggane, EM Dec. 00, p1247-1256.
- Nonlinear Buckling and Postbuckling of Cable-Stiffened Prestressed Domes, Vinasithamby Ragavan and Amde M. Amde (formerly Amde M. Wolde-Tinsae), EM Oct. 99, p1164-1172.
- Second-Order Axial Deflections of Imperfect 3D Beam-Column, J. Darío Aristizabal-Ochoa, EM Nov. 00, p1201-1208.
- Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. I: Analytical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May 00, p497-505.
- Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. II: Numerical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May 00, p506-514.
- Theory of Combined Sway and Nonsway Frames Buck-ling, P. Lokkas and J. G. A. Croll, EM Jan. 00, p84-92.
- Tracing Secondary Equilibrium Paths of Elastic Framed Structures, Lip H. Teh and Murray J. Clarke, EM Dec. 99, p1358-1364.
- Unilateral Buckling Restrained by Initial Force Supports, Wayne M. Falk and Sanjay Govindjee, EM Dec. 00, n1301-1302.
- Vibration and Stability of Thick Plates on Elastic Foundations, Hiroyuki Matsunaga, EM Jan. 00, p27-34.

- Aerodynamic Coupling Effects on Flutter and Buffeting of Bridges, Xinzhong Chen, Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p17-26.
- Simulation of Stochastic Wind Velocity Field on Long-Span Bridges, Yinghong Cao, Haifan Xiang and Ying Zhou, EM Jan. 00, p1-6.
- Time Domain Flutter and Buffeting Response Analysis of Bridges, Xinzhong Chen, Masaru Matsumoto and Ah-san Kareem, EM Jan. 00, p7-16.

# **Building frames**

Nonlinear Sliding Mode Control of Seismic Response of Building Frames, S. Sarbjeet and T. K. Datta, EM Apr. 00, p340-347.

Numerical Simulation of Advected Thermal Using Gaussian-Vortex Model, Jachyung Lee and Il Won Seo, EM Oct. 00, p1098-1106.

## **Buried** pipes

Soil Spring Constants of Buried Pipelines for Seismic Design, Katsumi Matsubara and Masaru Hoshiya, EM Jan. 00, p76-83.

Nonlinear Buckling and Postbuckling of Cable-Stiffened Prestressed Domes, Vinasithamby Ragavan and Amde M. Amde (formerly Amde M. Wolde-Tinsae), EM Oct. 99, p1164-1172.

General Thin Rod Model for Preslip Bending Response of Strand, S. Sathikh, S. Rajasekaran, Jayakumar and C. Jaberai, EM Feb. 00, p132-139.

Propagation Fronts During Calcium Leaching and Chloride Penetration, Marc Mainguy and Olivier Coussy, EM Mar. 00, p250-257.

## Calibration

- Microplane Model M4 for Concrete. II: Algorithm and Calibration, Ferhun C. Caner and Zdeněk P. Bažant, EM Sept. 00, p954-961.
- Water Migration Phenomenon Model in Cracked Con-crete. II: Calibration, Hideki Oshita and Tada-aki Tanabe, EM May 00, p544-549.

Experimental and Numerical Study of Damaged Cantilever, A. Rytter, M. Krawczuk and P. H. Kirkegaard, EM Jan. 00, p60-65.

### Cavities

Stretches of Fluid Materials for Stokes Flows in Circular Cavity, Tzong-Yih Hwu, EM May 00, p554-557.

- Effect of Aggregate Size on Attenuation of Rayleigh Surface Waves in Cement-Based Materials, Laurence J. Jacobs and Joseph O. Owino, EM Nov. 00, p1124-
- Propagation Fronts During Calcium Leaching and Chlo-ride Penetration, Marc Mainguy and Olivier Coussy, EM Mar. 00, p250-257.

### Centrifuge

- Numerical Simulation of Prenotched Gravity Dam Models, F. Barpi and S. Valente, EM June 00, p611-619.
- Transient Behavior of Complex Aeraulic or Hydraulic Networks Including Centrifugal Fans or Pumps, G. Mariaux and Y. Gervais, EM Nov. 00, p1180-1188.

Stiffness Evaluation and Damage Detection of Ceramic Candle Filters, Hung-Liang "Roger" Chen and Alejandro C. Kiriakidis, EM Mar. 00, p308-319.

Trapping and Generation of Waves by Vertical Porous Structures, T. Sahoo, M. M. Lee and A. T. Chwang, EM Oct. 00, p1074-1082.

Transition and Chaos in Two-Dimensional Flow Past a Square Cylinder, A. K. Saha, K. Muralidhar and G. Biswas, EM May 00, p523-532.

# Chemical reactions

- Alkali-Silica Reaction of Concretes with Admixtures of Concrete, Zongjing Li, Bin Mu and Jun Peng, EM Mar. 00, p243-249.
- Chemo-Mechanical Effects in Mortar Beams Subjected to Water Hydrolysis, C. Le Bellégo, B. Gérard and G. Pijaudier-Cabot, EM Mar. 00, p266-272.
- Fracture Mechanics of ASR in Concretes with Waste Glass Particles of Different Sizes, Zdeněk P. Bažant, Goangseup Zi and Christian Meyer, EM Mar. 00, p226-232.
- Thermo-Chemo-Mechanics of ASR Expansion in Concrete Structures, Franz-Josef Ulm, Olivier Coussy, Li Kefei and Catherine Larive, EM Mar. 00, p233-242.

Dispersion in Sediment-Laden Stream Flow, Chiu-On Ng, EM Aug. 00, p779-786.

# Chlorides

- Multiscale Modeling of Interactive Diffusion Processes in Concrete, Yunping Xi, Kaspar William and Dan M. Frangopol, EM Mar. 00, p258-265.
- Propagation Fronts During Calcium Leaching and Chlo-ride Penetration, Marc Mainguy and Olivier Coussy, EM Mar. 00, p250-257.

# Circular channels

Stretches of Fluid Materials for Stokes Flows in Circular Cavity, Tzong-Yih Hwu, EM May 00, p554-557.

### Circulation

BIEM Modeling of 3D Circulation and Transport in Stratified Estuaries, D. L. Young, B. C. Her and T. I. Eldho, EM Oct. 00, p1083-1092.

- Application of Lade's Criterion to Cam-Clay Model, Yang-Ping Yao and De'An Sun, EM Jan. 00, p112-119.
- Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. I: Theory, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1012-1019.
- Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, George Z. V p1020-1026.

### Closed form solutions

- Closed-Form Solution for Reinforced Timoshenko Beam on Elastic Foundation, Jian-Hua Yin, EM Aug. 00,
- Shear Lag of Thin-Walled Curved Box Girder Bridges, Q. Z. Luo and Q. S. Li, EM Oct. 00, p1111-1114.
- Two Tangential Forces and a Penny-Shaped Crack: a Complete Solution, V. l. Fabrikant, EM Jan. 00, p102-111.

## Closed loop systems

Closed Loop Predictive Optimal Control Algorithm Using ARMA Models, Ali Keyhani and Mehter Mohamed Allam, EM June 00, p620-625.

### Coal fired powerplants

Stiffness Evaluation and Damage Detection of Ceramic Candle Filters, Hung-Liang "Roger" Chen and Alejan-dro C. Kiriakidis, EM Mar. 00, p308-319.

Asymmetric Collapse Modes of Pipes under Combined Bending and External Pressure, E. Corona and S. Kyriakides, EM Dec. 00, p1232-1239.

- Deterministic Control of Column under Horizontal-Vertical Excitation, Seshasayee Ankireddi and Henry T. Y. Yang, EM Apr. 00, p373-380.
- Electromagnetic Image Reconstruction for Damage De-tection, Maria Q. Feng, Ce Liu, Xiangmin He and Masanobu Shinozuka, EM July 00, p725-729.

Buckling of Delaminated Composite Beams with Shear Deformation Effect, Izhak Sheinman and Yeoshua Frostig, EM Nov. 00, p1148-1155.

- Characterization of Random Composites Using Moving-Window Technique, S. C. Baxter and L. L. Graham, EM Apr. 00, p389-397,
- Electromagnetic Image Reconstruction for Damage De-tection, Maria Q. Feng, Ce Liu, Xiangmin He and Masanobu Shinozuka, EM July 00, p725-729.
- High-Accuracy Analysis of Beams of Bimodulus Materials, Toshiaki lwase and Ken-ichi Hirashima, EM Feb. 00, p149-156.
- Ultrasonic Monitoring of Material Degradation in FRP Composites, Olajide D. Dokun, Laurence J. Jacobs and Rami M. Haj-Ali, EM July 00, p704-710.

# Composite structures

- Buckling Analysis of Angle-Ply Multilaminated Long Hollow Cylinders, Jianqiao Ye, EM Aug. 99, p964-
- Delamination Buckling and Growth in Rings under Pressure, Sami El-Sayed and Srinivasan Sridharan, EM Oct. 00, p1033-1039.
- Nonlinear Analysis of Moderately Thick Laminated Rectangular Plates, K. K. Shukla and Y. Nath, EM Aug. 00, p831-838.
- Probabilistic Failure Analysis of Transversely Loaded Laminated Composite Plates Using First-Order Second Moment Method, S. C. Lin and T. Y. Kam, EM Aug. 00, p812-820.
- Stability Analysis of Composite-Plate Foundation Inter-action by Mixed FEM, Ali N. Doğruoğlu and Mehmet H. Omurtag, EM Sept. 00, p928-938.
- Study of Edge-Zone Equation of Mindlin-Reissner Plate Theory, Asghar Nosier, Arash Yavari and Shahram Sarkani, EM June 00, p647-651.
- Thermodynamic Damage Model for Composite Under Severe Loading, S. K. Naboulsi and A. N. Palazotto, EM Oct. 00, p1001-1011.

### Compression tests

Compression Tests on Cylinders with Circumferential Weld Depressions, P. A. Berry, J. M. Rotter and R. Q. Bridge, EM Apr. 00, p405-413.

## Computer applications

Integrated Procedure for Identification and Control of MDOF Structures, Vincenzo Gattulli and Francesco Romeo, EM July 00, p730-737.

- Alkali-Silica Reaction of Concretes with Admixtures of Concrete, Zongjing Li, Bin Mu and Jun Peng, EM Mar. 00, p243-249.
- Crack Propagation in Flexural Fatigue of Concrete, Kol-luru V. Subramaniam, Edward F. O'Neil, John S. Po-povics and Surendra P. Shah, EM Sept. 00, p891-898.
- Debonding and Calibration Shift of Optical Fiber Sensors in Concrete, Christopher K. Y. Leung, Xinyang Wang and Noah Olson, EM Mar. 00, p300-307.
- Element-Free Galerkin Simulations of Concrete Failure in Dynamic Uniaxial Tension Test, Leonard E. Schwer, Charles Gerlach and Ted Belytschko, EM May 00, p443-454.
- Fracture Mechanics of ASR in Concretes with Waste Glass Particles of Different Sizes, Zdeněk P. Bažant, Goangseup Zi and Christian Meyer, EM Mar. 00,
- Fracturing Rate Effect and Creep in Microplane Model for Dynamics, Zdeněk P. Bažant, Ferhun C. Caner, Mark D. Adley and Stephen A. Akers, EM Sept. 00,
- Large-Strain Generalization of Microplane Model for Concrete and Application, Zdeněk P. Bažant, Mark D. Adley, Ignacio Carol, Milan Jirásek, Stephen A. Akers, Bob Rohani, J. Donald Cargile and Ferhun C. Caner, EM Sept. 00, p971-980.
- Microplane Model M4 for Concrete. I: Formulation with Work-Conjugate Deviatoric Stress, Zdenèk Bažant, Ferhun C. Caner, Ignacio Carol, Mark D. Adley and Stephen A. Akers, EM Sept. 00, p944-953.
- Microplane Model M4 for Concrete. II: Algorithm and Calibration, Ferhun C. Caner and Zdeněk P. Bažant, EM Sept. 00, p954-961.
- Modeling of Early-Age Creep of Shotcrete. I: Model and Model Parameters, Jérôme Sercombe, Christian Hellmich, Franz-Josef Ulm and Herbert Mang, EM Mar. 00, p284-291.
- Modeling of Water Migration Phenomenon in Concrete as Homogeneous Material, Hideki Oshita and Tada-aki Tanabe, EM May 00, p551-553.
- Multiscale Modeling of Interactive Diffusion Proce in Concrete, Yunping Xi, Kaspar William and Dan M. Frangopol, EM Mar. 00, p258-265.
- Performance Evaluation of Elastoviscoplastic Concrete Model, Hong D. Kang and Kaspar J. William, EM Sept. 00, p995-1000.
- Poro-Damage Approach Applied to Hydro-Fracture Analysis of Concrete, Benoît Bary, Jean-Pierre Bournazel and Eric Bourdarot, EM Sept. 00, p937-943.
- Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. II: Application, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p175-185.
- P-Wave Arrival Determination and AE Characterization of Concrete, Zongjin Li, Faming Li, Xiar and Wenlong Yang, EM Feb. 00, p194-200. Xiang-Song Li
- Water Migration Phenomenon in Concrete in Postpeak Region, Hideki Oshita and Tada-aki Tanabe, EM June 00, p573-581.
- Water Migration Phenomenon in Concrete in Prepeak Region, Hideki Oshita and Tada-aki Tanabe, EM June 00, p565-572.
- Water Migration Phenomenon Model in Cracked Concrete. II: Calibration, Hideki Oshita and Tada-aki Tanabe, EM May 00, p544-549.
- Water Migration Phenomenon Model in Cracked Concrete. I: Formulation, Hideki Oshita and Tada-aki Tanabe, EM May 00, p539-543.

# Concrete pipes

Solution of Circular Sandwich Ring under Two Forces Acting along Diameter, S. T. Mau and X. Tao, EM Apr. 00, p348-357.

# Concrete, reinforced

- Assessing Damage in Corroded Reinforced Concrete Using Acoustic Emission, Dong-Jin Yoon, W. Jason Weiss and Surendra P. Shah, EM Mar. 00, p273-283.
- Electromagnetic Image Reconstruction for Damage De tection, Maria Q. Feng, Ce Liu, Xiangmin He and Masanobu Shinozuka, EM July 00, p725-729.

- Influence of Reinforcing Bars on Shrinkage Stresses in Concrete Slabs, Jun Zhang, Victor C. Li and Cynthia Wu, EM Dec. 00, p1297-1300.
- Multicomponent Model of Reinforced Concrete Joints for Cyclic Loading, F. Fleury, J.-M. Reynouard and O. Merabet, EM Aug. 00, p804-811.

- Influence of Reinforcing Bars on Shrinkage Stresses in Concrete Slabs, Jun Zhang, Victor C. Li and Cynthia Wu, EM Dec. 00, p1297-1300.
- Predicting Shrinkage Stress Field in Concrete Slab on Elastic Subgrade, Wei Yang, W. Jason Weiss and Surendra P. Shah, EM Jan. 00, p35-42.

### Concrete structures

- Chemo-Mechanical Effects in Mortar Beams Subjected to Water Hydrolysis, C. Le Bellégo, B. Gérard and G. Pijaudier-Cabot, EM Mar. 00, p266-272.
- Influence of Specimen Size/Geometry on Shrinkage Cracking of Rings, W. Jason Weiss, Wei Yang and Surendra P. Shah, EM Jan. 00, p93-101.
- New Directions in Concrete Health Monitoring Technology, Surendra P. Shah, John S. Popovics, Kolluru V. Subramaniam and Corina-Maria Aldea, EM July 00,
- Thermo-Chemo-Mechanics of ASR Expansion in Concrete Structures, Franz-Josef Ulm, Olivier Coussy, Li Kefei and Catherine Larive, EM Mar. 00, p233-242.

# Cone penetration tests

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1020-1026.

Influence of Specimen Size/Geometry on Shrinkage Cracking of Rings, W. Jason Weiss, Wei Yang and Surendra P. Shah, EM Jan. 00, p93-101.

### Conical bodies

Generalized Differential Quadrature for Frequency of Rotating Multilayered Conical Shell, Khin-Yong Lam and Li Hua, EM Nov. 00, p1156-1162.

# Connections, joints

Multicomponent Model of Reinforced Concrete Joints for Cyclic Loading, F. Fleury, J.-M. Reynouard and O. Merabet, EM Aug. 00, p804-811.

# Constitutive equations

Material Constitutive Law for Large Strains and Strain Rates, M. Alves, EM Feb. 00, p215-218.

- Analysis and Implementation of Resilient Modulus Models for Granular Solids, K. D. Hjelmstad and E. Taciro-glu, EM Aug. 00, p821-830.
- Fracturing Rate Effect and Creep in Microplane Model for Dynamics, Zdeněk P. Bažant, Ferhun C. Caner, Mark D. Adley and Stephen A. Akers, EM Sept. 00,
- Large-Strain Generalization of Microplane Model for Concrete and Application, Zdenèk P. Bažant, Mark D. Adley, Ignacio Carol, Milan Jirásek, Stephen A. Akers, Bob Rohani, J. Donald Cargile and Ferhun C. Caner, EM Sept. 00, p971-980.
- Microplane Model M4 for Concrete. I: Formulation with Work-Conjugate Deviatoric Stress, Zdenek Bažant, Ferhun C. Caner, Ignacio Carol, Mark D. Adley and Stephen A. Akers, EM Sept. 00, p944-953.
- Microplane Model M4 for Concrete. II: Algorithm and Calibration, Ferhun C. Caner and Zdeněk P. Bažant, EM Sept. 00, p954-961.
- Modeling of Early-Age Creep of Shotcrete. I: Model and Model Parameters, Jérôme Sercombe, Christian Hellmich, Franz-Josef Ulm and Herbert Mang, EM Mar. 00, p284-291.

Entropy and Granular Materials: Model, Colin B. Brown, EM June 00, p599-604.

# Contact pressure

Delamination Buckling and Growth in Rings under Pressure, Sami El-Sayed and Srinivasan Sridharan, EM Oct. 00, p1033-1039.

- Bench-Scale Experiment for Structural Control, M. Bat-taini, G. Yang and B. F. Spencer, Jr., EM Feb. 00,
- Integrated Procedure for Identification and Control of MDOF Structures, Vincenzo Gattulli and Francesco Romeo, EM July 00, p730-737.

### Control structures

Adjoint Sensitivity Analysis for Shallow-Water Wave Control, Brett F. Sanders and Nikolaos D. Katopodes, EM Sept. 00, p909-919.

Bench-Scale Experiment for Structural Control, M. Bat-taini, G. Yang and B. F. Spencer, Jr., EM Feb. 00,

Semiactive Control Strategies for MR Dampers: Compar-ative Study, Laura M. Jansen and Shirley J. Dyke, EM Aug. 00, p795-803.

Assessing Damage in Corroded Reinforced Concrete Using Acoustic Emission, Dong-Jin Yoon, W. Jason Weiss and Surendra P. Shah, EM Mar. 00, p273-283.

Optimal Structural Control Using Neural Networks, Ju-Tae Kim, Hyung-Jo Jung and In-Won Lee, EM Feb. 00, p201-205.

# Crack initiation

Influence of Reinforcing Bars on Shrinkage Stresses in Concrete Slabs, Jun Zhang, Victor C. Li and Cynthia Wu, EM Dec. 00, p1297-1300.

## Crack propagation

Assessing Damage in Corroded Reinforced Concrete Using Acoustic Emission, Dong-Jin Yoon, W. Jason Weiss and Surendra P, Shah, EM Mar. 00, p273-283.

Crack Propagation in Flexural Fatigue of Concrete, Kol-luru V. Subramaniam, Edward F. O'Neil, John S. Po-povics and Surendra P. Shah, EM Sept. 00, p891-898.

Numerical Simulation of Prenotched Gravity Dam Models, F. Barpi and S. Valente, EM June 00, p611-619.

New Directions in Concrete Health Monitoring Technology, Surendra P. Shah, John S. Popovics, Kolluru V. Subramaniam and Corina-Maria Aldea, EM July 00,

P-Wave Arrival Determination and AE Characterization of Concrete, Zongjin Li, Faming Li, Xiang-Song Li and Wenlong Yang, EM Feb. 00, p194-200.

### Cracks

Element-Free Galerkin Simulations of Concrete Failure in Dynamic Uniaxial Tension Test, Leonard E. Schwer, Charles Gerlach and Ted Belytschko, EM May 00, p443-454.

Experimental and Numerical Study of Damaged Cantilever, A. Rytter, M. Krawczuk and P. H. Kirkegaard, EM Jan. 00, p60-65.

Green's Function for Mixed Boundary Value Problem of Thin Plate, Xian-Feng Wang and Norio Hasebe, EM Aug. 00, p787-794.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. 1: Theory, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1310-1315.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. II: Results, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1316-1324.

Two Tangential Forces and a Penny-Shaped Crack: a Complete Solution, V. I. Fabrikant, EM Jan. 00, p102-

Water Migration Phenomenon Model in Cracked Concrete. I: Formulation, Hideki Oshita and Tada-aki Tanabe, EM May 00, p539-543.

Fracturing Rate Effect and Creep in Microplane Model for Dynamics, Zdeněk P. Bažant, Ferhun C. Caner, Mark D. Adley and Stephen A. Akers, EM Sept. 00, p962-970

Modeling of Early-Age Creep of Shotcrete. I: Model and Model Parameters, Jerôme Sercombe, Christian Hellmich, Franz-Josef Ulm and Herbert Mang, EM Mar. 00, p284-291.

Modeling of Early-Age Creep of Shotcrete. II: Applica-tion to Tunneling, Christian Hellmich, Jérôme Ser-combe, Franz-Josef Ulm and Herbert Mang, EM Mar.

Theory of Combined Sway and Nonsway Frames Buck-ling, P. Lokkas and J. G. A. Croll, EM Jan. 00, p84-92.

Shear Lag of Thin-Walled Curved Box Girder Bridges, Q. Z. Luo and Q. S. Li, EM Oct. 00, p1111-1114.

# Curved beams

Spatial Stability of Nonsymmetric Thin-Walled Curved Beams, I: Analytical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May 00, p497-505.

Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. II: Numerical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May 00, p506-514.

# Cyclic loads

Crack Propagation in Flexural Fatigue of Concrete, Kol-luru V. Subramaniam, Edward F. O'Neil, John S. Po-povics and Surendra P. Shah, EM Sept. 00, p891-898.

Frictional Dissipation in Axially Loaded Simple Straight Strands, Michel Labrosse, Anne Nawrocki and Ted Conway, EM June 00, p641-646.

Multicomponent Model of Reinforced Concrete Joints for Cyclic Loading, F. Fleury, J.-M. Reynouard and O. Merabet, EM Aug. 00, p804-811.

### Cylinders

Axisymmetric Wrinkling of Cylinders with Finite Strain. Ralf Peek, EM May 00, p455-461.

Buckling Analysis of Angle-Ply Multilaminated Long Hollow Cylinders, Jianqiao Ye, EM Aug. 99, p964-

Transition and Chaos in Two-Dimensional Flow Past a Square Cylinder, A. K. Saha, K. Muralidhar and G. Biswas, EM May 00, p523-532.

### Cylindrical shells

Compression Tests on Cylinders with Circumferential Weld Depressions, P. A. Berry, J. M. Rotter and R. Q. Bridge, EM Apr. 00, p405-413.

Damage Identification Using Committee of Neural Net-works, Tshilidzi Marwala, EM Jan. 00, p43-50.

Stiffness Evaluation and Damage Detection of Ceramic Candle Filters, Hung-Liang "Roger" Chen and Alejandro C. Kiriakidis, EM Mar. 00, p308-319.

Unsymmetrically Loaded Cylindrical Tank on Elastic Foundation, Moon-Hee Nam and Kwan-Hee Lee, EM Dec. 00, p1257-1261.

Damage Localization by Directly Using Incomplete Mode Shapes, Z. Y. Shi, S. S. Law and L. M. Zhang, EM June 00, p656-660.

Fracturing Rate Effect and Creep in Microplane Model for Dynamics, Zdeněk P. Bažant, Ferhun C. Caner, Mark D. Adley and Stephen A. Akers, EM Sept. 00. p962-970.

Large-Strain Generalization of Microplane Model for Concrete and Application, Zdenèk P. Bažant, Mark D. Adley, Ignacio Carol, Milan Jirásek, Stephen A. Akers, Bob Rohani, J. Donald Cargile and Ferhun C. Caner, EM Sept. 00, p971-980.

Microplane Model M4 for Concrete. I: Formulation with Work-Conjugate Deviatoric Stress, Zdenek Bažant, Ferhun C. Caner, Ignacio Carol, Mark D. Ad-ley and Stephen A. Akers, EM Sept. 00, p944-953.

Microplane Model M4 for Concrete. II: Algorithm and Calibration, Ferhun C. Caner and Zdeněk P. Bažant, EM Sept. 00, p954-961.

Structural Damage Detection from Modal Strain Energy Change, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Dec. 00, p1216-1223.

Thermodynamic Damage Model for Composite Under Severe Loading, S. K. Naboulsi and A. N. Palazotto, EM Oct. 00, p1001-1011.

# Damage assessment

Application of Neural Networks for Detection of Changes in Nonlinear Systems, S. F. Masri, A. W. Smyth, A. G. Chassiakos, T. K. Caughey and N. F. Hunter, EM July 00, p666-676.

Assessing Damage in Corroded Reinforced Concrete Using Acoustic Emission, Dong-Jin Yoon, W. Jason Weiss and Surendra P. Shah, EM Mar. 00, p273-283.

Damage Detection in Beam Structures Based on Frequency Measurements, Fabrizio Vestroni and Danilo Capecchi, EM July 00, p761-768.

Damage Detection in Urban Areas by SAR Imagery, Masanobu Shinozuka, Roger Ghanem, Bijan Housh-mand and Babak Mansouri, EM July 00, p769-777.

Damage Identification Using Committee of Neural Networks, Tshilidzi Marwala, EM Jan. 00, p43-50.

Electromagnetic Image Reconstruction for Damage De-tection, Maria Q. Feng, Ce Liu, Xiangmin He and Masanobu Shinozuka, EM July 00, p725-729.

Issues in Infrastructure Health Monitoring for Management, A. E. Aktan, F. N. Catbas, K. A. Grimmelsman and C. J. Tsikos, EM July 00, p711-724.

Optimum Sensor Placement for Structural Damage Detection, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Nov. 00, p1173-1179.

P-Wave Arrival Determination and AE Characterization of Concrete, Zongjin Li, Faming Li, Xiang-Song Li and Wenlong Yang, EM Feb. 00, p194-200.

Statistical Damage Assessment of Framed Structures from Static Responses, Inho Yeo, Soobong Shin, Hae Sung Lee and Sung-Pil Chang, EM Apr. 00, p414-421.

Wavelet-Based Approach for Structural Damage Detection, Z. Hou, M. Noori and R. St. Amand, EM July 00, p677-683.

Analytical Description of Multidegree Bilinear Hysteretic System, Naser Mostaghel and Ryan A. Byrd, EM June

Equivalent Viscous Damping for Bilinear Hysteretic Oscillator, C. K. Reddy and R. Pratap, EM Nov. 00, p1189-1196.

Response of Damped Oscillators to Cycloidal Pulses, Nicos Makris and Shih-Po Chang, EM Feb. 00, p123-

Semiactive Control Strategies for MR Dampers: Comparative Study, Laura M. Jansen and Shirley J. Dyke, EM Aug. 00, p795-803.

Vibration of Vehicle on Compressed Rail on Viscoelastic Foundation, D. Y. Zheng, F. T. K. Au and Y. K. Cheung, EM Nov. 00, p1141-1147.

Numerical Simulation of Prenotched Gravity Dam Mod-els, F. Barpi and S. Valente, EM June 00, p611-619.

## Data acquisition

Damage Detection in Urban Areas by SAR Imagery, Masanobu Shinozuka, Roger Ghanem, Bijan Housh-mand and Babak Mansouri, EM July 00, p769-777.

Nonlinear Analysis of Moderately Thick Laminated Rectangular Plates, K. K. Shukla and Y. Nath, EM Aug. 00, p831-838.

## Deformation

Analytical Description of Multidegree Bilinear Hysteretic System, Naser Mostaghel and Ryan A. Byrd, EM June 00. p588-598

Unilateral Buckling Restrained by Initial Force Supports, Wayne M. Falk and Sanjay Govindjee, EM Dec. 00, p1301-1302.

Chemo-Mechanical Effects in Mortar Beams Subjected to Water Hydrolysis, C. Le Bellégo, B. Gérard and G. Pijaudier-Cabot, EM Mar. 00, p266-272.

Debonding and Calibration Shift of Optical Fiber Sensors in Concrete, Christopher K. Y. Leung, Xinyang Wang and Noah Olson, EM Mar. 00, p300-307.

# Degrees of freedom

Analytical Description of Multidegree Bilinear Hysteretic System, Naser Mostaghel and Ryan A. Byrd, EM June 00, p588-598.

Integrated Procedure for Identification and Control of MDOF Structures, Vincenzo Gattulli and Francesco Romeo, EM July 00, p730-737.

Phase Space Reduction in Stochastic Dynamics, ta and G. I. Schuëller, EM June 00, p626-632.

# Delaminating

Buckling of Delaminated Composite Beams with Shear Deformation Effect, Izhak Sheinman and Yeoshua Frostig, EM Nov. 00, p1148-1155.

Delamination Buckling and Growth in Rings under Pressure, Sami El-Sayed and Srinivasan Sridharan, EM Oct. 00, p1033-1039.

Effect of Block Size and Joint Geometry on Jointed Rock Hydraulics and REV, P. H. S. W. Kulatilake and Bibhuti B. Panda, EM Aug. 00, p850-858.

Adjoint Sensitivity Analysis for Shallow-Water Wave Control, Brett F. Sanders and Nikolaos D. Katopodes, EM Sept. 00, p909-919.

# Design standards

Compression Tests on Cylinders with Circumferential Weld Depressions, P. A. Berry, J. M. Rotter and R. Q. Bridge, EM Apr. 00, p405-413.

### Deterioration

- Assessing Damage in Corroded Reinforced Concrete Using Acoustic Emission, Dong-Jin Yoon, W. Jason Weiss and Surendra P. Shah, EM Mar. 00, p273-283.
- Editorial, Christopher Leung, Franz Ulm, Yunping Xi, Gilles Pijaudier-Cabot and Sture Stine, EM Mar. 00, p225
- Hysteretic Models for Deteriorating Inelastic Structures, Mettupalayam V. Sivaselvan and Andrei M. Reinhorn, EM June 00, p633-640.

# Dielectric constant

Electromagnetic Image Reconstruction for Damage Detection, Maria Q. Feng, Ce Liu, Xiangmin He and Masanobu Shinozuka, EM July 00, p725-729.

### Differential equations

- Bending of Sector Plates on Elastic Foundations by Bes-sel Functions. You-He Zhou, Jianping Zhang and Xiao Jing Zheng, EM June 00, p653-655.
- Generalized Differential Quadrature for Frequency of Rotating Multilayered Conical Shell, Khin-Yong Lam and Li Hua, EM Nov. 00, p1156-1162.

- Multiscale Modeling of Interactive Diffusion Process in Concrete, Yunping Xi, Kaspar William and Dan M. Frangopol, EM Mar. 00, p258-265.
- Propagation Fronts During Calcium Leaching and Chlo-ride Penetration, Marc Mainguy and Olivier Coussy, EM Mar. 00, p250-257.

Adjoint Sensitivity Analysis for Shallow-Water Wave Control, Brett F. Sanders and Nikolaos D. Katopodes, EM Sept. 00, p909-919.

Dispersion in Sediment-Laden Stream Flow, Chiu-On Ng, EM Aug. 00, p779-786.

- Green's Function for Mixed Boundary Value Problem of Thin Plate, Xian-Feng Wang and Norio Hasebe, EM Aug. 00, p787-794.
- Green's Functions of Think Plate Bending Problem under Fixed Boundary, Norio Hasebe and Xian-Feng Wang, EM Feb. 00, p206-213.
- Predicting Shrinkage Stress Field in Concrete Slab on Elastic Subgrade, Wei Yang, W. Jason Weiss and Surendra P. Shah, EM Jan. 00, p35-42.

Perforated Wall Breakwater with Internal Horizontal Plate, T. L. Yip and Allen T. Chwang, EM May 00, p533-538.

# Domes, structural

Nonlinear Buckling and Postbuckling of Cable-Stiffened Prestressed Domes, Vinasithamby Ragavan and Amde M. Amde (formerly Amde M. Wolde-Tinsae), EM Oct. 99, p1164-1172.

Turbulent Boundary Layer over Symmetric Bodies with Rigid and Flexible Surfaces, M. S. Abu Sharekh, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Apr. 00,

# Durability

- Editorial, Christopher Leung, Franz Ulm, Yunping Xi, Gilles Pijaudier-Cabot and Sture Stine, EM Mar. 00,
- Multiscale Modeling of Interactive Diffusion Processes in Concrete, Yunping Xi, Kaspar William and Dan M. Frangopol, EM Mar. 00, p258-265.
- Thermo-Chemo-Mechanics of ASR Expansion in Concrete Structures, Franz-Josef Ulm, Olivier Coussy, Li Kefei and Catherine Larive, EM Mar. 00, p233-242.

Model for Dynamic Analysis of Wood Frame Shear Walls, David W. Dinehart and Harry W. Shenton, III, EM Sept. 00, p899-908.

- Phase Space Reduction in Stochastic Dynamics, M. Vasta and G. I. Schuëller, EM June 00, p626-632.
- Thermodynamic Damage Model for Composite Under Severe Loading, S. K. Naboulsi and A. N. Palazotto, EM Oct. 00, p1001-1011.

# Dynamic pressure

Simulation of Dynamic Liquid Pressure for Tuned Liquid Damper, Hong-Nan Li, Y. Jia and Jing Lu, EM Dec. 00, p1303-1305.

## **Dynamic properties**

Updating Structural System Parameters Using Frequency Response Data, Philip D. Cha and James P. Tuck-Lee, EM Dec. 00, p1240-1246.

# Dynamic response

- Dynamic Response of Soft Poroelastic Bed to Nonlinear Water Wave— Boundary Layer Correction Approach, P. C. Hsieh, L. H. Huang and T. W. Wang, EM Oct. 00, p1064-1073.
- Simultaneous Estimation of System and Input Parameters from Output Measurements, Tinghui Shi, Nicholas P. Jones and J. Hugh Ellis, EM July 00, p746-753.

## Dynamic structural analysis

Large-Strain Generalization of Microplane Model for Concrete and Application, Zdenèk P, Bažant, Mark D, Adley, Ignacio Carol, Milan Jirásek, Stephen A. Akers, Bob Rohani, J. Donald Cargile and Ferhun C. Caner, EM Sept. 00, p971-980.

### **Dynamic tests**

- Element-Free Galerkin Simulations of Concrete Failure in Dynamic Uniaxial Tension Test, Leonard E. Schwer, Charles Gerlach and Ted Belytschko, EM May 00, p443-454.
- Stiffness Evaluation and Damage Detection of Ceramic Candle Filters, Hung-Liang "Roger" Chen and Alejandro C. Kiriakidis, EM Mar. 00, p308-319.

- Analytical Description of Multidegree Bilinear Hysteretic System, Naser Mostaghel and Ryan A. Byrd, EM June 00, p588-598.
- Damage Localization by Directly Using Incomplete Mode Snapes, Z. Y. Shi, S. S. Law and L. M. Zhang, EM June 00, p656-660.
- Green's Functions for Two-and-a-Half-Dimensional Elastodynamic Problems, António J. B. Tadeu and Eduardo Kausel, EM Oct. 00, p1093-1097.
- Material Constitutive Law for Large Strains and Strain Rates, M. Alves, EM Feb. 00, p215-218.
- Modal Analysis of Linear Asymmetric Nonconservative Systems, Sondipon Adhikari, EM Dec. 99, p1372-1379.
- New Point Estimates for Probability Moments, Yan-Gang Zhao and Tetsuro Ono, EM Apr. 00, p433-436.
- Pitfalls of Deterministic and Random Analyses of Systems with Hysteresis, P. D. Spanos and B. A. Zelden, EM Oct. 00, p1108-1110.
- Statistical Analysis of Fragility Curves, Masanobu Shino-zuka, M. Q. Feng, Jongheon Lee and Toshihilo Naganuma, EM Dec. 00, p1224-1231.
- Structural Damage Detection from Modal Strain Energy Change, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Dec. 00, p1216-1223.
- Transient Dynamics of Stochastically Parametered Beams, Sondipon Adhikari and C. S. Manohar, EM Nov. 00, p1131-1140.
- Transition and Chaos in Two-Dimensional Flow Past a Square Cylinder, A. K. Saha, K. Muralidhar and G. Biswas, EM May 00, p523-532.

# Earthquake damage

Statistical Analysis of Fragility Curves, Masanobu Shino-zuka, M. Q. Feng, Jongheon Lee and Toshihilo Naganuma, EM Dec. 00, p1224-1231.

# Earthquake engineering

Active Pulse Structural Control Using Artificial Neural Networks, Shih-Lin Hung, C. Y. Kao and J. C. Lee, EM Aug. 00, p839-849.

# Earthquakes

- Conditional Simulation of a Class of Nonstationary Space-Time Random Fields, E. Heredia-Zavoni and S. Santa-Cruz, EM Apr. 00, p398-404.
- Designing a General Neurocontroller for Water Towers, Abdolreza Joghataie and Ardalan Vahidi, EM June 00, p582-587.
- Semiactive Control Strategies for MR Dampers: Compar-ative Study, Laura M. Jansen and Shirley J. Dyke, EM Aug. 00, p795-803.

Response of Inhomogeneous Seabed around Buried Pipe-line under Ocean Waves, D. S. Jeng and Y. S. Lin, EM Apr. 00, p321-332.

Modal Analysis of Linear Asymmetric Nonconservative Systems, Sondipon Adhikari, EM Dec. 99, p1372-1379.

Optimum Sensor Placement for Structural Damage Detection, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Nov. 00, p1173-1179.

- Solution of Circular Sandwich Ring under Two Forces Acting along Diameter, S. T. Mau and X. Tao, EM Apr. 00, p348-357.
- Tracing Secondary Equilibrium Paths of Elastic Framed Structures, Lip H. Teh and Murray J. Clarke, EM Dec. 99, p1358-1364.

### Elastic foundations

- Bending of Sector Plates on Elastic Foundations by Bes-sel Functions, You-He Zhou, Jianping Zhang and Xiao Jing Zheng, EM June 00, p653-655.
- Closed-Form Solution for Reinforced Timoshenko Beam on Elastic Foundation, Jian-Hua Yin, EM Aug. 00,
- Predicting Shrinkage Stress Field in Concrete Slab on Elastic Subgrade, Wei Yang, W. Jason Weiss and Surendra P. Shah, EM Jan. 00, p35-42.
- Stability Analysis of Composite-Plate Foundation Inter-action by Mixed FEM, Ali N. Dogruoglu and Mehmet H. Omurtag, EM Sept. 00, p928-938.
- Thermal Postbuckling of Preloaded Shear Deformable Laminated Plates, Hui-Shen Shen, EM May 00, p488-496.
- Unsymmetrically Loaded Cylindrical Tank on Elastic Foundation, Moon-Hee Nam and Kwan-Hee Lee, EM Dec. 00, p1257-1261.
- Vibration and Stability of Thick Plates on Elastic Foundations, Hiroyuki Matsunaga, EM Jan. 00, p27-34.

- Elastic-Plastic Model of Pinned Beams Subjected to Impulsive Loading, M. K. Boutros, EM Sept. 00, p920-927.
- Green's Functions for Two-and-a-Half-Dimensional Elastodynamic Problems, António J. B. Tadeu and Eduardo Kausel, EM Oct. 00, p1093-1097.
- Multidomain SFBEM and Its Application in Elastic Plane Problems, Cheng Su and Dajian Han, EM Oct. 00,
- Second-Order Axial Deflections of Imperfect 3D Beam-Column, J. Darío Aristizabal-Ochoa, EM Nov. 00,
- Soil Spring Constants of Buried Pipelines for Seismic Design, Katsumi Matsubara and Masaru Hoshiya, EM Jan. 00, p76-83.
- Symmetry of Tangent Stiffness Matrices of 3D Elastic Frame, Lip H. Teh and Murray J. Clarke, EM Feb. 99, p248-251.
- Two Tangential Forces and a Penny-Shaped Crack: a Complete Solution, V. I. Fabrikant, EM Jan. 00, p102-

- Application of Lade's Criterion to Cam-Clay Model, Yang-Ping Yao and De'An Sun, EM Jan. 00, p112-
- Equivalent Viscous Damping for Bilinear Hysteretic Oscillator, C. K. Reddy and R. Pratap, EM Nov. 00, p1189-1196.
- Performance Evaluation of Elastoviscoplastic Concrete Model, Hong D. Kang and Kaspar J. William, EM Sept. 00, p995-1000.

# **Electrical conductivity**

Electromagnetic Image Reconstruction for Damage Detection, Maria Q. Feng, Ce Liu, Xiangmin He and Masanobu Shinozuka, EM July 00, p725-729.

# End restraint

Pullout Response of a Smooth Fiber with an End Anchorage, C. Sujivorakul, A. M. Waas and A. E. Naaman, EM Sept. 00, p986-993.

# **Energy conservation**

Elastic-Plastic Model of Pinned Beams Subjected to Impulsive Loading, M. K. Boutros, EM Sept. 00, p920-927.

# **Energy dissipation**

Frictional Dissipation in Axially Loaded Simple Straight Strands, Michel Labrosse, Anne Nawrocki and Ted Conway, EM June 00, p641-646.

# **Engineering mechanics**

Editorial, Christopher Leung, Franz Ulm, Yunping Xi, Gilles Pijaudier-Cabot and Sture Stine, EM Mar. 00, p.225.

Entropy

Entropy and Granular Materials: Experiments, Colin B. Brown, David G. Elms, Mark T. Hanson, Khashayar Nikzad and R. Elaine Worden, EM June 00, p605-610.

Entropy and Granular Materials: Model, Colin B. Brown, EM June 00, p599-604.

### Environmental factors

Debonding and Calibration Shift of Optical Fiber Sens in Concrete, Christopher K. Y. Leung, Xinyang Wang and Noah Olson, EM Mar. 00, p300-307.

Equations of motion

Elastic-Plastic Model of Pinned Beams Subjected to Impulsive Loading, M. K. Boutros, EM Sept. 00, p920-927.

# Estuaries

BIEM Modeling of 3D Circulation and Transport in Stratified Estuaries, D. L. Young, B. C. Her and T. I. Eldho, EM Oct. 00, p1083-1092.

Deterministic Control of Column under Horizontal-Vertical Excitation, Seshasayee Ankireddi and Henry T. Y. Yang, EM Apr. 00, p373-380.

Entropy and Granular Materials: Experiments, Colin B. Brown, David G. Elms, Mark T. Hanson, Khashayar Nikzad and R. Elaine Worden, EM June 00, p605-610.

Optimal Nonlinear Stochastic Control of Hysteretic Systems, W. Q. Zhu, Z. G. Ying, Y. Q. Ni and J. M. Ko, EM Oct. 00, p1027-1032.

Wavelet-Based Approach for Structural Damage Detec-tion, Z. Hou, M. Noori and R. St. Amand, EM July 00, p677-683.

# Experimentation

Entropy and Granular Materials: Experiments, Colin B. Brown, David G. Elms, Mark T. Hanson, Khashayar Nikzad and R. Elaine Worden, EM June 00, p605-610.

Water Migration Phenomenon in Concrete in Postpeak Region, Hideki Oshita and Tada-aki Tanabe, EM June 00, p573-581.

Water Migration Phenomenon in Concrete in Prepeak Region, Hideki Oshita and Tada-aki Tanabe, EM June 00, p565-572.

# External pressure

Asymmetric Collapse Modes of Pipes under Combined Bending and External Pressure, E. Corona and S. Kyriakides, EM Dec. 00, p1232-1239.

Issues in Infrastructure Health Monitoring for Management, A. E. Aktan, F. N. Catbas, K. A. Grimmelsman and C. J. Tsikos, EM July 00, p711-724.

Application of Lade's Criterion to Cam-Clay Model, Yang-Ping Yao and De'An Sun, EM Jan. 00, p112-119.

Element-Free Galerkin Simulations of Concrete Failure in Dynamic Uniaxial Tension Test, Leonard E. Schwer, Charles Gerlach and Ted Belytschko, EM May 00, p443-454,

Probabilistic Failure Analysis of Transversely Loaded Laminated Composite Plates Using First-Order Second Moment Method, S. C. Lin and T. Y. Kam, EM Aug. 00. p812-820.

Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. I: Theory, Zdeněk P. Bažant and Drahomir Novák, EM Feb. 00, p166-174.

Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. II: Application, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p175-185.

Transient Behavior of Complex Aeraulic or Hydraulic Networks Including Centrifugal Fans or Pumps, G. Mariaux and Y. Gervais, EM Nov. 00, p1180-1188.

Crack Propagation in Flexural Fatigue of Concrete, Kolluru V. Subramaniam, Edward F. O'Neil, John S. Popovics and Surendra P. Shah, EM Sept. 00, p891-898.

Experimental and Numerical Study of Damaged Cantilever, A. Rytter, M. Krawczuk and P. H. Kirkegaard, EM Jan. 00, p60-65.

Limit-State Surface Element Method: Application to Fa-tigue Reliability with NDE Inspections, B. Moran, Y. Xu and J. D. Achenbach, EM July 00, p684-692.

New Directions in Concrete Health Monitoring Technology, Surendra P. Shah, John S. Popovics, Kolluru V. Subramaniam and Corina-Maria Aldea, EM July 00, p754-760

Wavelet-Based Approach for Structural Damage Detec-tion, Z. Hou, M. Noori and R. St. Amand, EM July 00, p677-683.

Bench-Scale Experiment for Structural Control, M. Bat-taini, G. Yang and B. F. Spencer, Jr., EM Feb. 00,

Deterministic Control of Column under Horizontal-Vertical Excitation, Seshasayee Ankireddi and Henry T. Y. Yang, EM Apr. 00, p373-380.

### Fiber optics

Debonding and Calibration Shift of Optical Fiber Sensors in Concrete, Christopher K. Y. Leung, Xinyang Wang and Noah Olson, EM Mar. 00, p300-307.

## Fiber reinforced plastics

Ultrasonic Monitoring of Material Degradation in FRP Composites, Olajide D. Dokun, Laurence J. Jacobs and Rami M. Haj-Ali, EM July 00, p704-710.

Pullout Response of a Smooth Fiber with an End Ancherage, C. Sujivorakul, A. M. Waas and A. E. Naaman, EM Sept. 00, p986-993.

Numerical Simulation of Advected Thermal Using Gaussian-Vortex Model, Jaehyung Lee and Il Won Seo, EM Oct. 00, p1098-1106.

Stiffness Evaluation and Damage Detection of Ceramic Candle Filters, Hung-Liang "Roger" Chen and Alejandro C. Kiriakidis, EM Mar. 00, p308-319.

### Finite difference method

Buckling of Delaminated Composite Beams with Shear Deformation Effect, Izhak Sheinman and Yeoshua Frostig, EM Nov. 00, p1148-1155.

### Finite element method

Direct Generation of Non-Gaussian Weighted Integrals, R. C. Micaletti, EM Jan. 00, p66-75.

Experimental and Numerical Study of Damaged Cantilever, A. Rytter, M. Krawczuk and P. H. Kirkegaard, EM Jan. 00, p60-65.

Finite-Element Analysis of Double-Free-Surface Flow through Slit in Dam, Farhang Daneshmand. Shailendra K. Sharan and Mohammad H. Kadivar, EM May 00, p515-522.

Nonlinear Buckling and Postbuckling of Cable-Stiffened Prestressed Domes, Vinasithamby Ragavan and Amde M. Amde (formerly Amde M. Wolde-Tinsae), EM Oct. 99, p1164-1172.

Response of Inhomogeneous Seabed around Buried Pipe-line under Ocean Waves, D. S. Jeng and Y. S. Lin, EM Apr. 00, p321-332.

Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. II: Numerical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May 00, p506-514.

Stability Analysis of Composite-Plate Foundation Inter-action by Mixed FEM, Ali N. Doğruoğlu and Mehmet H. Omurtag, EM Sept. 00, p928-938.

Thermo-Chemo-Mechanics of ASR Expansion in Concrete Structures, Franz-Josef Ulm, Olivier Coussy, Li Kefei and Catherine Larive, EM Mar. 00, p233-242.

Transient Dynamics of Stochastically Parametered Beams, Sondipon Adhikari and C. S. Manohar, EM Nov. 00, p1131-1140.

Weighted Integral SFEM Including Higher Order Terms, Chang-Koon Choi and Hyuk-Chun Noh, EM Aug. 00, p859-866.

# Finite elements

Damage Detection in Beam Structures Based on Frequency Measurements, Fabrizio Vestroni and Danilo Capecchi, EM July 00, p761-768.

Development of Four-Node Membrane Element Containing Central Circular Hole, A. K. Soh and Z. F. Long, EM Nov. 00, p1115-1119.

Limit-State Surface Element Method: Application to Fa-tigue Reliability with NDE Inspections, B. Moran, Y. Xu and J. D. Achenbach, EM July 00, p684-692.

Modeling Interactive Buckling of Plate Structures Using Special Elements, Srinivasan Sridharan and Madjid Zeggane, EM Dec. 00, p1247-1256.

Multicomponent Model of Reinforced Concrete Joints for Cyclic Loading, F. Fleury, J.-M. Reynouard and O. Merabet, EM Aug. 00, p804-811.

Unsymmetrically Loaded Cylindrical Tank on Elastic Foundation, Moon-Hee Nam and Kwan-Hee Lee, EM Dec. 00, p1257-1261.

# Flexibility

Bridle Sling Lifting of Elastic Beam, C. Y. Wang, EM Nov. 00, p1198-1200.

Turbulent Boundary Layer over Symmetric Bodies with Rigid and Flexible Surfaces, M. S. Abu Sharekh, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Apr. 00, p422-431

# Flexible pipes

Solution of Circular Sandwich Ring under Two Forces Acting along Diameter, S. T. Mau and X. Tao, EM Apr. 00, p348-357.

## Flexural strength

Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. I: Theory, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p166-174.

Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. II: Application, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p175-185.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. I: Theory, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1310-1315.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. II: Results, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1316-1324.

## Flow characteristics

LES and RANS Studies of Oscillating Flows over Flat Plate, Chin-Tsau Hsu, Xiyun Lu and Man-Kim Kwan, EM Feb. 00, p186-190.

Stretches of Fluid Materials for Stokes Flows in Circular Cavity, Tzong-Yih Hwu, EM May 00, p554-557.

Finite-Element Analysis of Double-Free-Surface Flow through Slit in Dam, Farhang Daneshmand, Shailendra K. Sharan and Mohammad H. Kadivar, EM May 00, p515-522

Stretches of Fluid Materials for Stokes Flows in Circular Cavity, Tzong-Yih Hwu, EM May 00, p554-557.

# Fluid-structure interaction

Poro-Damage Approach Applied to Hydro-Fracture Analysis of Concrete, Benoît Barry, Jean-Pierre Bour-nazel and Eric Bourdarot, EM Sept. 00, p937-943.

Aerodynamic Coupling Effects on Flutter and Buffeting of Bridges, Xinzhong Chen, Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p17-26.

Time Domain Flutter and Buffeting Response Analysis of Bridges, Xinzhong Chen, Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p7-16.

Alkali-Silica Reaction of Concretes with Admixtures of Concrete, Zongjing Li, Bin Mu and Jun Peng, EM Mar. 00, p243-249.

Soil Spring Constants of Buried Pipelines for Seismic Design, Katsumi Matsubara and Masaru Hoshiya, EM Jan. 00, p76-83.

Unilateral Buckling Restrained by Initial Force Supports, Wayne M. Falk and Sanjay Govindjee, EM Dec. 00,

Vibration of Vehicle on Compressed Rail on Viscoelastic Foundation, D. Y. Zheng, F. T. K. Au and Y. K. Cheung, EM Nov. 00, p1141-1147.

# Fourier series

Unsymmetrically Loaded Cylindrical Tank on Elastic Foundation, Moon-Hee Nam and Kwan-Hee Lee, EM Dec. 00, p1257-1261.

# Fracture mechanics

Crack Propagation in Flexural Fatigue of Concrete, Kolluru V. Subramaniam, Edward F. O'Neil, John S. Popovics and Surendra P. Shah, EM Sept. 00, p891-898.

Experimental and Numerical Study of Damaged Cantilever, A. Rytter, M. Krawczuk and P. H. Kirkegaard, EM Jan. 00, p60-65.

Fracture Mechanics of ASR in Concretes with Waste Glass Particles of Different Sizes, Zdeněk P. Bažant, Goangseup Zi and Christian Meyer, EM Mar. 00, p226-232.

- Poro-Damage Approach Applied to Hydro-Fracture Analysis of Concrete, Benoît Bary, Jean-Pierre Bour-nazel and Eric Bourdarot, EM Sept. 00, p937-943.
- Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. I: Theory, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p166-174.
- Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. II: Application, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p175-185.

Fracturing Rate Effect and Creep in Microplane Model for Dynamics, Zdeněk P. Bažant, Ferhun C. Caner, Mark D. Adley and Stephen A. Akers, EM Sept. 00, p962-970

### Framed structures

- Multicomponent Model of Reinforced Concrete Joints for Cyclic Loading, F. Fleury, J.-M. Reynouard and O. Merabet, EM Aug. 00, p804-811.
- Statistical Damage Assessment of Framed Structures from Static Responses, Inho Yeo, Soobong Shin, Hae Sung Lee and Sung-Pil Chang, EM Apr. 00, p414-421.
- Structural Identification of Frames under Earthquake Loading—Time Domain Identification Algorithms, Chin-Hsiung Loh, Chi-Ying Lin and Chih-Chieh Huang, EM July 00, p693-703.
- Tracing Secondary Equilibrium Paths of Elastic Framed Structures, Lip H. Teh and Murray J. Clarke, EM Dec. 99, p1358-1364.

- Model for Dynamic Analysis of Wood Frame Shear Walls, David W. Dinehart and Harry W. Shenton, III, EM Sept. 00, p899-908.
- Second-Order Axial Deflections of Imperfect 3D Beam-Column, J. Darío Aristizabal-Ochoa, EM Nov. 00, p1201-1208.
- Theory of Combined Sway and Nonsway Frames Buck-ling, P. Lokkas and J. G. A. Croll, EM Jan. 00, p84-92.

Finite-Element Analysis of Double-Free-Surface Flow through Slit in Dam, Farhang Daneshmand, Shailendra K. Sharan and Mohammad H. Kadivar, EM May 00, p515-522.

## Frequency

- Conditional Simulation of a Class of Nonstationary Space-Time Random Fields, E. Heredia-Zavoni and S. Santa-Cruz, EM Apr. 00, p398-404.
- Generalized Differential Quadrature for Frequency of Rotating Multilayered Conical Shell, Khin-Yong Lam and Li Hua, EM Nov. 00, p1156-1162.

# Frequency analysis

Damage Detection in Beam Structures Based on Frequency Measurements, Fabrizio Vestroni and Danilo Capecchi, EM July 00, p761-768.

- Damage Identification Using Committee of Neural Networks, Tshilidzi Marwala, EM Jan. 00, p43-50.
- Transient Dynamics of Stochastically Parametered Beams, Sondipon Adhikari and C. S. Manohar, EM Nov. 00, p1131-1140.
- Updating Structural System Parameters Using Frequency Response Data, Philip D. Cha and James P. Tuck-Lee, EM Dec. 00, p1240-1246.

- Frictional Dissipation in Axially Loaded Simple Straight Strands, Michel Labrosse, Anne Nawrocki and Ted Conway, EM June 00, p641-646.
- General Thin Rod Model for Preslip Bending Response of Strand, S. Sathikh, S. Rajasekaran, Jayakumar and C. Jaberaj, EM Feb. 00, p132-139.
- Microplane Model M4 for Concrete. I: Formulation with Work-Conjugate Deviatoric Stress, Zdenek Bažant, Ferhun C. Caner, Ignacio Carol, Mark D. Ad-ley and Stephen A. Akers, EM Sept. 00, p944-953.
- Response of Damped Oscillators to Cycloidal Pulses, Nicos Makris and Shih-Po Chang, EM Feb. 00, p123-131

Finite-Element Analysis of Double-Free-Surface Flow through Slit in Dam, Farhang Daneshmand, Shailendra K. Sharan and Mohammad H. Kadivar, EM May 00, p515-522.

# Gaussian process

Direct Generation of Non-Gaussian Weighted Integrals, R. C. Micaletti, EM Jan. 00, p66-75.

Numerical Simulation of Advected Thermal Using Gaussian-Vortex Model, Jaehyung Lee and Il Won Seo, EM Oct. 00, p1098-1106.

# Geometric nonlinearity

- Nonlinear Analysis of Moderately Thick Laminated Rectangular Plates, K. K. Shukla and Y. Nath, EM Aug. 00, p831-838.
- Nonlinear Buckling and Postbuckling of Cable-Stiffened Prestressed Domes, Vinasithamby Ragavan and Amde M. Amde (formerly Amde M. Wolde-Tinsae), EM Oct. 99, p1164-1172.
- Symmetry of Tangent Stiffness Matrices of 3D Elastic Frame, Lip H. Teh and Murray J. Clarke, EM Feb. 99, p248-251.
- Tracing Secondary Equilibrium Paths of Elastic Framed Structures, Lip H. Teh and Murray J. Clarke, EM Dec. 99, p1358-1364.

### Geometry

- Effect of Block Size and Joint Geometry on Jointed Rock Hydraulics and REV, P. H. S. W. Kulatilake and Bibhuti B. Panda, EM Aug. 00, p850-858.
- Influence of Specimen Size/Geometry on Shrinkage Cracking of Rings, W. Jason Weiss, Wei Yang and Surendra P. Shah, EM Jan. 00, p93-101.

### Geosynthetics

Closed-Form Solution for Reinforced Timoshenko Beam on Elastic Foundation, Jian-Hua Yin, EM Aug. 00, p868-874

### Glass

Fracture Mechanics of ASR in Concretes with Waste Glass Particles of Different Sizes, Zdeněk P. Bažant, Goangseup Zi and Christian Meyer, EM Mar. 00, p226-232.

Grain Boundary Migration in Metals: Thermodynamics, Kinetics, Applications by G. Gottstein and L. S. Shvindlerman, George Z. Voyaidjis, EM Aug. 00,

### Granular media

- Analysis and Implementation of Resilient Modulus Models for Granular Solids, K. D. Hjelmstad and E. Taciroglu, EM Aug. 90, p821-830.
- Entropy and Granular Materials: Experiments, Colin B. Brown, David G. Elms, Mark T. Hanson, Khashayar Nikzad and R. Elaine Worden, EM June 00, p605-610.
- ntropy and Granular Materials: Model, Colin B. Brown, EM June 00, p599-604.

# Greens function

- Green's Function for Mixed Boundary Value Problem of Thin Plate, Xian-Feng Wang and Norio Hasebe, EM Aug. 00, p787-794.
- Green's Functions for Two-and-a-Half-Dimensional Elastodynamic Problems, António J. B. Tadeu and Eduardo Kausel, EM Oct. 00, p1093-1097.
- Green's Functions of Think Plate Bending Problem under Fixed Boundary, Norio Hasebe and Xian-Feng Wang, EM Feb. 00, p206-213.

Exact Static Solution of Grillwork with Periodic Supports, H. C. Chan, C. W. Cai and J. K. Liu, EM May 00, p480-487.

# Ground motion

Nonlinear Static Procedure for Fragility Curve Development, Masanobu Shinozuka, Maria Q. Feng, Ho-Kyung Kim and Sang-Hoon Kim, EM Dec. 00,

# Half space

Torsional Surface Waves in Nonhomogeneous Anisotropic Medium under Initial Stress, S. Dey, A. K. Gupta, S. Gupta and A. M. Prasad, EM Nov. 00, p1120-

# Heliyes

Flow in Helical Annular Pipe, JinSuo Zhang, BenZhao Zhang and HuaJun Chen, EM Oct. 00, p1040-1047.

- Development of Four-Node Membrane Element Containing Central Circular Hole, A. K. Soh and Z. F. Long, EM Nov. 00, p1115-1119.
- Green's Functions of Think Plate Bending Problem under Fixed Boundary, Norio Hasebe and Xian-Feng Wang, EM Feb. 00, p206-213.

# Homogeneity

Dispersion in Sediment-Laden Stream Flow, Chiu-On Ng, EM Aug. 00, p779-786.

Modeling of Water Migration Phenomenon in Concrete as Homogeneous Material, Hideki Oshita and Tada-aki Tanabe, EM May 00, p551-553.

Numerical Simulation of Prenotched Gravity Dam Models, F. Barpi and S. Valente, EM June 00, p611-619.

Transient Behavior of Complex Aeraulic or Hydraulic Networks Including Centrifugal Fans or Pumps, Mariaux and Y. Gervais, EM Nov. 00, p1180-1188.

# Hydraulic properties

Effect of Block Size and Joint Geometry on Jointed Rock Hydraulics and REV, P. H. S. W. Kulatilake and Bi-bhuti B. Panda, EM Aug. 00, p850-858.

### Hydraulic structures

Finite-Element Analysis of Double-Free-Surface Flow through Slit in Dam, Farhang Daneshmand, Shailendra K. Sharan and Mohammad H. Kadivar, EM May 00,

### Hydrodynamics

- BIEM Modeling of 3D Circulation and Transport in Stratified Estuaries, D. L. Young, B. C. Her and T. I. Eldho, EM Oct. 00, p1083-1092.
- Perforated Wall Breakwater with Internal Horizontal Plate, T. L. Yip and Allen T. Chwang, EM May 00, p533-538.

### Hydromechanics

Poro-Damage Approach Applied to Hydro-Fracture Analysis of Concrete, Benoît Bary, Jean-Pierre Bour-nazel and Eric Bourdarot, EM Sept. 00, p937-943.

- Deterministic Control of Column under Horizontal-Vertical Excitation, Seshasayee Ankireddi and Henry T. Y. Yang, EM Apr. 00, p373-380.
- Pitfalls of Deterministic and Random Analyses of Systems with Hysteresis, P. D. Spanos and B. A. Zelden, EM Oct. 00, p1108-1110.

### Hysteresis models

Hysteretic Models for Deteriorating Inelastic Structures, Mettupalayam V. Sivaselvan and Andrei M. Reinhorn, EM June 00, p633-640.

# Hysteretic systems

- Analytical Description of Multidegree Bilinear Hysteretic System, Naser Mostaghel and Ryan A. Byrd, EM June 00. p588-598.
- Equivalent Viscous Damping for Bilinear Hysteretic Oscillator, C. K. Reddy and R. Pratap, EM Nov. 00, p1189-1196.
- Frictional Dissipation in Axially Loaded Simple Straight Strands, Michel Labrosse, Anne Nawrocki and Ted Conway, EM June 00, p641-646.
- Hysteretic Models for Deteriorating Inelastic Structures, Mettupalayam V. Sivaselvan and Andrei M. Reinhorn, EM June 00, p633-640.
- Optimal Nonlinear Stochastic Control of Hysteretic Systems, W. Q. Zhu, Z. G. Ying, Y. Q. Ni and J. M. Ko, EM Oct. 00, p1027-1032.

- Application of Neural Networks for Detection of Changes in Nonlinear Systems, S. F. Masri, A. W. Smyth, A. G. Chassiakos, T. K. Caughey and N. F. Hunter, EM July 00, p666-676
- Integrated Procedure for Identification and Control of MDOF Structures, Vincenzo Gattulli and Francesco Romeo, EM July 00, p730-737.
- Simultaneous Estimation of System and Input Parameters from Output Measurements, Tinghui Shi, Nicholas P. Jones and J. Hugh Ellis, EM July 00, p746-753.
- Statistical Damage Assessment of Framed Structures from Static Responses, Inho Yeo, Soobong Shin, Hae Sung Lee and Sung-Pil Chang, EM Apr. 00, p414-421.
- Structural Identification of Frames under Earthquake Loading—Time Domain Identification Algorithms. Chin-Hsiung Loh, Chi-Ying Lin and Chih-Chieh Huang, EM July 00, p693-703.

# Imaging techniques

- Damage Detection in Urban Areas by SAR Imagery, Masanobu Shinozuka, Roger Ghanem, Bijan Housh-mand and Babak Mansouri, EM July 00, p769-777.
- Electromagnetic Image Reconstruction for Damage Detection, Maria Q. Feng, Ce Liu, Xiangmin He and Masanobu Shinozuka, EM July 00, p725-729.

### Imperfections

ompression Tests on Cylinders with Circumferential Weld Depressions, P. A. Berry, J. M. Rotter and R. Q. Bridge, EM Apr. 00, p405-413.

# Impulsive loads

Elastic-Plastic Model of Pinned Beams Subjected to Impulsive Loading, M. K. Boutros, EM Sept. 00, p920-927.

Plastic Deformations of Impulsively Loaded, Rigid-Plastic Beams, Michelle S. Hoo Fatt, Yi Liu and Z. Brandon Wang, EM Feb. 00, p157-165.

Response of Damped Oscillators to Cycloidal Pulses, Nicos Makris and Shih-Po Chang, EM Feb. 00, p123-

### Inclusions

Green's Function for Mixed Boundary Value Problem of Thin Plate. Xian-Feng Wang and Norio Hasebe, EM Aug. 00, p787-794.

### Inelastic action

Hysteretic Models for Deteriorating Inelastic Structures, Mettupalayam V. Sivaselvan and Andrei M. Reinhorn, EM June 00, p633-640.

### Information

Entropy and Granular Materials: Experiments, Colin B. Brown, David G. Elms, Mark T. Hanson, Khashayar Nikzad and R. Elaine Worden, EM June 00, p605-610.

Entropy and Granular Materials: Model, Colin B. Brown, EM June 00, p599-604.

## Information systems

Issues in Infrastructure Health Monitoring for Management, A. E. Aktan, F. N. Catbas, K. A. Grimmelsman and C. J. Tsikos, EM July 00, p711-724.

Issues in Infrastructure Health Monitoring for Management, A. E. Aktan, F. N. Catbas, K. A. Grimmelsman and C. J. Tsikos, EM July 00, p711-724.

## Integral equations

Boundary Integral Equations for Solids and Fluids by Marc Bonnet, George D. Manolis, EM Jan. 00, p120-

Two Tangential Forces and a Penny-Shaped Crack: a Complete Solution, V. I. Fabrikant, EM Jan. 00, p102-

Weighted Integral SFEM Including Higher Order Terms, Chang-Koon Choi and Hyuk-Chun Noh, EM Aug. 00, p859-866.

Direct Generation of Non-Gaussian Weighted Integrals, R. C. Micaletti, EM Jan. 00, p66-75.

# Interactions

Short-Wave and Wave Group Scattering by Submerged Porous Plate, Maria da Graça Neves, Iñigo J. Losada and Miguel A. Losada, EM Oct. 00, p1048-1056.

Stability Analysis of Composite-Plate Foundation Inter-action by Mixed FEM, Ali N. Doğruoğlu and Mehmet H. Omurtag, EM Sept. 00, p928-938.

Debonding and Calibration Shift of Optical Fiber Sensors in Concrete, Christopher K. Y. Leung, Xinyang Wang and Noah Olson, EM Mar. 00, p300-307.

Pullout Response of a Smooth Fiber with an End Anchorage, C. Sujivorakul, A. M. Waas and A. E. Naaman, EM Sept. 00, p986-993.

Solution of Circular Sandwich Ring under Two Forces Acting along Diameter, S. T. Mau and X. Tao, EM Apr. 00, p348-357.

# Internal forces

Wind-Induced Peak Bending Moments in Low-Rise Building Frames, Massimiliano Gioffrè, Mircea Gri-goriu, Michael Kasperski and Emil Simiu, EM Aug. (00, p879-881.

# Isotropic material

Two Tangential Forces and a Penny-Shaped Crack: a Complete Solution, V. I. Fabrikant, EM Jan. 00, p102-

# Jointed rock

Effect of Block Size and Joint Geometry on Jointed Rock Hydraulics and REV, P. H. S. W. Kulatilake and Bi-bhuti B. Panda, EM Aug. 00, p850-858.

# Kalman filter

Simultaneous Estimation of System and Input Parameters from Output Measurements, Tinghui Shi, Nicholas P. Jones and J. Hugh Ellis, EM July 00, p746-753.

### Kinetics

Grain Boundary Migration in Metals: Thermodynamics, Kinetics, Applications by G. Gottstein and L. S. Shvindlerman, George Z. Voyaidjis, EM Aug. 00,

### Lagrangian functions

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. I: Theory, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1012-1019.

### Laminar flow

Laminar Poroelastic Media Flow, C. H. Song and L. H. Huang, EM Apr. 00, p358-366.

LES and RANS Studies of Oscillating Flows over Flat Plate, Chin-Tsau Hsu, Xiyun Lu and Man-Kim Kwan, EM Feb. 00, p186-190.

Buckling Analysis of Angle-Ply Multilaminated Long Hollow Cylinders, Jianqiao Ye, EM Aug. 99, p964-

Nonlinear Analysis of Moderately Thick Laminated Rectangular Plates, K. K. Shukla and Y. Nath, EM Aug. 00, p831-838.

Probabilistic Failure Analysis of Transversely Loaded Laminated Composite Plates Using First-Order Second Moment Method, S. C. Lin and T. Y. Kam, EM Aug. 00, p812-820.

Stability Analysis of Composite-Plate Foundation Inter-action by Mixed FEM, Ali N. Doğruoğlu and Mehmet H. Omurtag, EM Sept. 00, p928-938.

Study of Edge-Zone Equation of Mindlin-Reissner Plate Theory, Asghar Nosier, Arash Yavari and Shahram Sarkani, EM June 00, p647-651.

Thermal Postbuckling of Preloaded Shear Deformable Laminated Plates, Hui-Shen Shen, EM May 00, p488-Three-Dimensional Elasticity Solutions of Laminated Annular Spherical Shells, Chih-Ping Wu and Jyh-Yeuan Lo, EM Aug. 00, p882-885.

# Large structures

Simultaneous Estimation of System and Input Parameters from Output Measurements, Tinghui Shi, Nicholas P. Jones and J. Hugh Ellis, EM July 00, p746-753.

Effect of Aggregate Size on Attenuation of Rayleigh Sur-iace Waves in Cement-Based Materials, Laurence J. Jacobs and Joseph O. Owino, EM Nov. 00, p1124-

# Lateral displacement effect

Water Migration Phenomenon in Concrete in Prepeak Region, Hideki Oshita and Tada-aki Tanabe, EM June 00, p565-572

# Lateral pressure

Water Migration Phenomenon in Concrete in Postpeak Region, Hideki Oshita and Tada-aki Tanabe, EM June

# Lavered systems

Solution of Circular Sandwich Ring under Two Forces Acting along Diameter, S. T. Mau and X. Tao, EM Apr. 00, p348-357.

# Leaching

Chemo-Mechanical Effects in Mortar Beams Subjected to Water Hydrolysis, C. Le Bellégo, B. Gérard and G. Pijaudier-Cabot, EM Mar. 00, p266-272.

Propagation Fronts During Calcium Leaching and Chlo-ride Penetration, Marc Mainguy and Olivier Coussy, EM Mar. 00, p250-257.

# Lifting

Bridle Sling Lifting of Elastic Beam, C. Y. Wang, EM Nov. 00, p1198-1200.

# Limit states

Limit-State Surface Element Method: Application to Fa-tigue Reliability with NDE Inspections, B. Moran, Y. Xu and J. D. Achenbach, EM July 00, p684-692.

# Linear systems

Modal Analysis of Linear Asymmetric Nonconservative Systems, Sondipon Adhikari, EM Dec. 99, p1372-1379.

New Light on Response of Linear Systems Subjected to Random Nonstationary Filtered Inputs, G. Falsone, EM Dec. 00, p1273-1286.

Instability of Thin Pipes Encased in Oval Rigid Cavity, Abdel-Aziz M. Omara, P.E., Leslie K. Guice, P.E., W. Thomas Straughan, P.E. and Fred Akl, P.E., EM Apr.

## Liquids

Dimulation of Dynamic Liquid Pressure for Tuned Liquid Damper, Hong-Nan Li, Y. Jia and Jing Lu, EM Dec. 00, pl 303-1305.

### Loading rate

Performance Evaluation of Elastoviscoplastic Concrete Model, Hong D. Kang and Kaspar J. William, EM Sept. 00, p995-1000.

Derivative of Buckling Load with Respect to Support Lo-cations, Zhong-Sheng Liu, Hai-Chang Hu and Cheng Huang, EM June 00, p559-564.

General Carryover Matrix of Plane Rod Loaded Perpendicular to Its Plane, R. Artan, EM Aug. 00, p875-878.

Damage Localization by Directly Using Incomplete Mode Shapes, Z. Y. Shi, S. S. Law and L. M. Zhang, EM June 00, p656-660.

Microplane Model M4 for Concrete. II: Algorithm and Calibration, Ferhun C. Caner and Zdeněk P. Bažant, EM Sept. 00, p954-961.

Modeling Interactive Buckling of Plate Structures Using Special Elements, Srinivasan Sridharan and Madjid Zeggane, EM Dec. 00, p1247-1256.

P-Wave Arrival Determination and AE Characterization of Concrete. Zongjin Li, Faming Li, Xiang-Song Li and Wenlong Yang, EM Feb. 00, p194-200.

Structural Damage Detection from Modal Strain Energy Change, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Dec. 00, p1216-1223.

### Location

Derivative of Buckling Load with Respect to Support Lo-cations, Zhong-Sheng Liu, Hai-Chang Hu and Cheng Huang, EM June 00, p559-564.

Optimum Sensor Placement for Structural Damage Detection, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Nov. 00, p1173-1179.

# Low-rise buildings

Wind-Induced Peak Bending Moments in Low-Rise Building Frames, Massimiliano Gioffrè, Mircea Gri-goriu, Michael Kasperski and Emil Simiu, EM Aug. 00. p879-881.

Electromagnetic Image Reconstruction for Damage Detection, Maria Q. Feng, Ce Liu, Xiangmin He and Masanobu Shinozuka, EM July 00, p725-729.

# Management systems

Issues in Infrastructure Health Monitoring for Management, A. E. Aktan, F. N. Catbas, K. A. Grimmelsman and C. J. Tsikos, EM July 00, p711-724.

Updating Structural System Parameters Using Frequency Response Data, Philip D. Cha and James P. Tuck-Lee, EM Dec. 00, p1240-1246.

Material Constitutive Law for Large Strains and Strain Rates, M. Alves, EM Feb. 00, p215-218.

# Materials, properties

Characterization of Random Composites Using Moving-Window Technique, S. C. Baxter and L. L. Graham, EM Apr. 00, p389-397.

# Mathematical models

Modeling of Water Migration Phenomenon in Concrete as Homogeneous Material, Hideki Oshita and Tada-aki Tanabe, EM May 00, p551-553.

Structural Identification of Frames under Earthquake Loading—Time Domain Identification Algorithms, Chin-Hsiung Loh, Chi-Ying Lin and Chih-Chieh Huang, EM July 00, p693-703.

Water Migration Phenomenon Model in Cracked Con-crete. II: Calibration, Hideki Oshita and Tada-aki Tanabe, EM May 00, p544-549.

Water Migration Phenomenon Model in Cracked Concrete. I: Formulation, Hideki Oshita and Tada-aki Tanabe, EM May 00, p539-543.

General Carryover Matrix of Plane Rod Loaded Perpendicular to Its Plane, R. Artan, EM Aug. 00, p875-878.

Chemo-Mechanical Effects in Mortar Beams Subjected to Water Hydrolysis, C. Le Bellégo, B. Gérard and G. Pijaudier-Cabot, EM Mar. 00, p266-272.

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. 1: Theory, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1012-1019.

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1020-1026.

## Membranes

Development of Four-Node Membrane Element Containing Central Circular Hole, A. K. Soh and Z. F. Long, EM Nov. 00, p1115-1119.

### Metals

Grain Boundary Migration in Metals: Thermodynamics, Kinetics. Applications by G. Gottstein and L. S. Shvindlerman, George Z. Voyaidjis, EM Aug. 00, p888.

### Microstructure

Characterization of Random Composites Using Moving-Window Technique, S. C. Baxter and L. L. Graham, EM Apr. 00, p389-397.

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. 1: Theory, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1012-1019.

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1020-1026.

P-Wave Arrival Determination and AE Characterization of Concrete, Zongjin Li, Faming Li, Xiang-Song Li and Wenlong Yang, EM Feb. 00, p194-200.

Thermodynamic Damage Model for Composite Under Severe Loading, S. K. Naboulsi and A. N. Palazotto, EM Oct. 00, p1001-1011.

### Migration

Grain Boundary Migration in Metals: Thermodynamics, Kinetics. Applications by G. Gottstein and L. S. Shvindlerman, George Z. Voyaidjis, EM Aug. 00, p888.

# Modal analysis

Damage Identification Using Committee of Neural Networks, Tshilidzi Marwala, EM Jan. 00, p43-50.

Damage Localization by Directly Using Incomplete Mode Shapes, Z. Y. Shi, S. S. Law and L. M. Zhang, EM June 00, p656-660.

Experimental and Numerical Study of Damaged Cantilever, A. Rytter, M. Krawczuk and P. H. Kirkegaard, EM Jan. 00, p60-65.

Modal Analysis of Linear Asymmetric Nonconservative Systems, Sondipon Adhikari, EM Dec. 99, p1372-1379.

Structural Damage Detection from Modal Strain Energy Change, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Dec. 00, p1216-1223.

# Modeling

Instability of Thin Pipes Encased in Oval Rigid Cavity, Abdel-Aziz M. Omara, P.E., Leslie K. Guice, P.E., W. Thomas Straughan, P.E. and Fred Akl, P.E., EM Apr. 00, p381-388.

Model for Dynamic Analysis of Wood Frame Shear Walls, David W. Dinehart and Harry W. Shenton, III, EM Sept. 00, p899-908.

Multiscale Modeling of Interactive Diffusion Processes in Concrete, Yunping Xi, Kaspar William and Dan M. Frangopol, EM Mar. 00, p258-265.

# Models

Buckling of Delaminated Composite Beams with Shear Deformation Effect, Izhak Sheinman and Yeoshua Frostig, EM Nov. 00, p1148-1155.

Entropy and Granular Materials: Model, Colin B. Brown, EM June 00, p599-604,

General Thin Rod Model for Preslip Bending Response of Strand, S. Sathikh, S. Rajasekaran, Jayakumar and C. Jaberaj, EM Feb. 00, p132-139.

Influence of Reinforcing Bars on Shrinkage Stresses in Concrete Slabs, Jun Zhang, Victor C. Li and Cynthia Wu, EM Dec. 00, p1297-1300.

Laminar Poroelastic Media Flow, C. H. Song and L. H. Huang, EM Apr. 00, p358-366.

Performance Evaluation of Elastoviscoplastic Concrete Model, Hong D. Kang and Kaspar J. William, EM Sept. 00, p995-1000.

Transient Behavior of Complex Aeraulic or Hydraulic Networks Including Centrifugal Fans or Pumps, G. Mariaux and Y. Gervais, EM Nov. 00, p1180-1188.

# Moments

New Point Estimates for Probability Moments, Yan-Gang Zhao and Tetsuro Ono, EM Apr. 00, p433-436.

## Monitoring

Application of Neural Networks for Detection of Changes in Nonlinear Systems, S. F. Masri, A. W. Smyth, A. G. Chassiakos, T. K. Caughey and N. F. Hunter, EM July 00, p666-676.

Bayesian Probabilistic Approach to Structural Health Monitoring, M. W. Vanik, J. L. Beck and S. K. Au, EM July 00, p738-745.

Editorial, Roger Ghanem and Stein Sture, EM July 00, p665.

Issues in Infrastructure Health Monitoring for Management, A. E. Aktan, F. N. Catbas, K. A. Grimmelsman and C. J. Tsikos, EM July 00, p711-724.

New Directions in Concrete Health Monitoring Technology, Surendra P. Shah, John S. Popovics, Kolluru V. Subramaniam and Corina-Maria Aldea, EM July 00, p754-760.

Ultrasonic Monitoring of Material Degradation in FRP Composites, Olajide D. Dokun, Laurence J. Jacobs and Rami M. Haj-Ali, EM July 00, p704-710.

### Motion effects

Direct Numerical Procedure for Solution of Moving Oscillator Problems, B. Yang, C. A. Tan and L. A. Bergman, EM May 00, p462-469.

## Multistory buildings

Multidomain SFBEM and Its Application in Elastic Plane Problems, Cheng Su and Dajian Han, EM Oct. 00, p1057-1063.

## Natural frequency

Damage Detection in Beam Structures Based on Frequency Measurements. Fabrizio Vestroni and Danilo Capecchi, EM July 00, p761-768.

Vibration and Stability of Thick Plates on Elastic Foundations, Hiroyuki Matsunaga, EM Jan. 00, p27-34.

## Navier-Stokes equations

Simulation of Dynamic Liquid Pressure for Tuned Liquid Damper, Hong-Nan Li, Y. Jia and Jing Lu, EM Dec. 00, p1303-1305.

### Neural networks

Active Pulse Structural Control Using Artificial Neural Networks, Shih-Lin Hung, C. Y. Kao and J. C. Lee, EM Aug. 00, p839-849.

Alkali-Silica Reaction of Concretes with Admixtures of Concrete, Zongjing Li, Bin Mu and Jun Peng, EM Mar. 00, p243-249.

Application of Neural Networks for Detection of Changes in Nonlinear Systems, S. F. Masri, A. W. Smyth, A. G. Chassiakos, T. K. Caughey and N. F. Hunter, EM July 00, p666-676.

Damage Identification Using Committee of Neural Networks, Tshilidzi Marwala, EM Jan. 00, p43-50.

Designing a General Neurocontroller for Water Towers, Abdolreza Joghataie and Ardalan Vahidi, EM June 00, p582-587.

Optimal Structural Control Using Neural Networks, Ju-Tae Kim, Hyung-Jo Jung and In-Won Lee, EM Feb. 00, p201-205.

Structural Identification of Frames under Earthquake Loading—Time Domain Identification Algorithms, Chin-Hsiung Loh, Chi-Ying Lin and Chih-Chieh Huang, EM July 00, p693-703.

# Nondestructive tests

Effect of Aggregate Size on Attenuation of Rayleigh Surface Waves in Cement-Based Materials, Laurence J. Jacobs and Joseph O. Owino, EM Nov. 00, p1124-1130.

Limit-State Surface Element Method: Application to Fatigue Reliability with NDE Inspections, B. Moran, Y. Xu and J. D. Achenbach, EM July 00, p684-692.

New Directions in Concrete Health Monitoring Technology, Surendra P. Shah, John S. Popovics, Kolluru V. Subramaniam and Corina-Maria Aldea, EM July 00, p754-760.

Stiffness Evaluation and Damage Detection of Ceramic Candle Filters, Hung-Liang "Roger" Chen and Alejandro C. Kiriakidis, EM Mar. 00, p308-319.

Wavelet-Based Approach for Structural Damage Detection, Z. Hou, M. Noori and R. St. Amand, EM July 00, p677-683.

# Nonlinear analysis

Analysis and Implementation of Resilient Modulus Models for Granular Solids, K. D. Hjelmstad and E. Taciroglu, EM Aug. 00, p821-830.

Dynamic Response of Soft Poroelastic Bed to Nonlinear Water Wave – Boundary Layer Correction Approach, P. C. Hsieh, L. H. Huang and T. W. Wang, EM Oct. 00, p1064-1073. Nonlinear Analysis of Moderately Thick Laminated Rectangular Plates, K. K. Shukla and Y. Nath, EM Aug. 00, p831-838.

Nonlinear Static Procedure for Fragility Curve Development, Masanobu Shinozuka, Maria Q. Feng. Ho-Kyung Kim and Sang-Hoon Kim, EM Dec. 00, p1287-1295.

Statistical Analysis of Fragility Curves, Masanobu Shinozuka, M. Q. Feng, Jongheon Lee and Toshihilo Naganuma, EM Dec. 00, p1224-1231.

### Nonlinear systems

Application of Neural Networks for Detection of Changes in Nonlinear Systems, S. F. Masri, A. W. Smyth, A. G. Chassiakos, T. K. Caughey and N. F. Hunter, EM July 00, 9666-676.

Optimal Structural Control Using Neural Networks, Ju-Tae Kim, Hyung-Jo Jung and In-Won Lee, EM Feb. 00, p201-205.

Phase Space Reduction in Stochastic Dynamics, M. Vasta and G. I. Schuëller, EM June 00, p626-632.

Structural Identification of Frames under Earthquake Loading—Time Domain Identification Algorithms, Chin-Hsiung Loh, Chi-Ying Lin and Chih-Chieh Huang, EM July 00, p693-703.

### Non-sway frames

Theory of Combined Sway and Nonsway Frames Buckling, P. Lokkas and J. G. A. Croll, EM Jan. 00, p84-92.

### Numerical analysis

Direct Numerical Procedure for Solution of Moving Oscillator Problems, B. Yang, C. A. Tan and L. A. Bergman, EM May 00, p462-469.

Finite Analytic Model for Flow and Transport in Unsaturated Zone, Whey-Fone Tsai, Tim-Hau Lee, Ching-Jen Chen, Shin-Jye Liang and Chia-Chen Kuo, EM May 00, p470-479.

High-Accuracy Analysis of Beams of Bimodulus Materials, Toshiaki Iwase and Ken-ichi Hirashima, EM Feb. 00, p149-156.

Simulation of Stochastic Wind Velocity Field on Long-Span Bridges, Yinghong Cao, Haifan Xiang and Ying Zhou, EM Jan. 00, p1-6.

## Numerical models

Development of Four-Node Membrane Element Containing Central Circular Hole, A. K. Soh and Z. F. Long, EM Nov. 00, p1115-1119.

Element-Free Galerkin Simulations of Concrete Failure in Dynamic Uniaxial Tension Test, Leonard E. Schwer, Charles Gerlach and Ted Belytschko, EM May 00, p443-454.

Numerical Simulation of Advected Thermal Using Gaussian-Vortex Model, Jaehyung Lee and Il Won Seo, EM Oct. 00, p1098-1106.

Numerical Simulation of Prenotched Gravity Dam Models, F. Barpi and S. Valente, EM June 00, p611-619.

# Open channel flow

Dispersion in Sediment-Laden Stream Flow, Chiu-On Ng, EM Aug. 00, p779-786.

# Optimal control methods

Bench-Scale Experiment for Structural Control, M. Battaini, G. Yang and B. F. Spencer, Jr., EM Feb. 00, p140-148.

Designing a General Neurocontroller for Water Towers, Abdolreza Joghataie and Ardalan Vahidi, EM June 00, p582-587.

Optimal Nonlinear Stochastic Control of Hysteretic Systems, W. Q. Zhu, Z. G. Ying, Y. Q. Ni and J. M. Ko, EM Oct. 00, p1027-1032.

# Optimal design

Derivative of Buckling Load with Respect to Support Locations, Zhong-Sheng Liu, Hai-Chang Hu and Cheng Huang, EM June 00, p559-564.

# Optimization

Bridle Sling Lifting of Elastic Beam, C. Y. Wang, EM Nov. 00, p1198-1200.

Closed Loop Predictive Optimal Control Algorithm Using ARMA Models, Ali Keyhani and Mehter Mohamed Allam, EM June 00, p620-625.

Optimum Sensor Placement for Structural Damage Detection, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Nov. 00, p1173-1179.

Statistical Damage Assessment of Framed Structures from Static Responses, Inho Yeo, Soobong Shin, Hae Sung Lee and Sung-Pil Chang, EM Apr. 00, p414-421.

# Orthotropic plate

Buckling of Long Orthotropic Plates Including Higher-Order Transverse Shear, Ulf Nyman and Per Johan Gustafsson, EM Dec. 00, p1209-1215.

Direct Numerical Procedure for Solution of Moving Os-cillator Problems, B. Yang, C. A. Tan and L. A. Berg-man, EM May 00, p462-469.

Equivalent Viscous Damping for Bilinear Hysteretic Os-cillator, C. K. Reddy and R. Pratap, EM Nov. 00, p1189-1196.

Response of Damped Oscillators to Cycloidal Pulses, Nicos Makris and Shih-Po Chang, EM Feb. 00, p123-

# Oscillatory flow

LES and RANS Studies of Oscillating Flows over Flat Plate, Chin-Tsau Hsu, Xiyun Lu and Man-Kim Kwan, EM Feb. 00, p186-190.

Numerical Simulation of Advected Thermal Using Gaussian-Vortex Model, Jaehyung Lee and Il Won Seo, EM Oct. 00, p1098-1106.

Bayesian Probabilistic Approach to Structural Health Monitoring, M. W. Vanik, J. L. Beck and S. K. Au, EM July 00, p738-745.

Updating Structural System Parameters Using Frequency Response Data, Philip D. Cha and James P. Tuck-Lee, EM Dec. 00, p1240-1246.

### Particle size

Fracture Mechanics of ASR in Concretes with Waste Glass Particles of Different Sizes, Zdenek P. Bažant, Goangseup Zi and Christian Meyer, EM Mar. 00, p226-232.

Analysis and Implementation of Resilient Modulus Models for Granular Solids, K. D. Hjelmstad and E. Taciroglu, EM Aug. 00, p821-830.

Wind-Induced Peak Bending Moments in Low-Rise Building Frames, Massimiliano Gioffrè, Mircea Gri-goriu, Michael Kasperski and Emil Simiu, EM Aug. 00. p879-881.

# Penetration

Multiscale Modeling of Interactive Diffusion Processes in Concrete, Yunping Xi, Kaspar William and Dan M. Frangopol. EM Mar. 00, p258-265.

Propagation Fronts During Calcium Leaching and Chloride Penetration, Marc Mainguy and Olivier Coussy, EM Mar. 00, p250-257.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. I: Theory, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1310-1315.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. II: Results, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1316-1324.

# Performance evaluation

Nonlinear Static Procedure for Fragility Curve Development, Masanobu Shinozuka, Maria Q. Feng, Ho-Kyung Kim and Sang-Hoon Kim, EM Dec. 00, p1287-1295.

Performance Evaluation of Elastoviscoplastic Concrete Model, Hong D. Kang and Kaspar J. William, EM Sept. 00, p995-1000.

Exact Static Solution of Grillwork with Periodic Supports, H. C. Chan, C. W. Cai and J. K. Liu, EM May 00, p480-487.

Trapping and Generation of Waves by Vertical Porous Structures, T. Sahoo, M. M. Lee and A. T. Chwang, EM Oct. 00, p1074-1082.

Water Migration Phenomenon Model in Cracked Con-crete. II: Calibration, Hideki Oshita and Tada-aki Tanabe, EM May 00, p544-549.

Water Migration Phenomenon Model in Cracked Concrete. I: Formulation, Hideki Oshita and Tada-aki Tanabe, EM May 00, p539-543.

# Perturbation theory

Flow in Helical Annular Pipe, JinSuo Zhang, BenZhao Zhang and HuaJun Chen, EM Oct. 00, p1040-1047.

## Pipe lining

Instability of Thin Pipes Encased in Oval Rigid Cavity, Abdel-Aziz M. Omara, P.E., Leslie K. Guice, P.E., W. Thomas Straughan, P.E. and Fred Akl, P.E., EM Apr. 00, p381-388.

Asymmetric Collapse Modes of Pipes under Combined Bending and External Pressure, E. Corona and S. Kyriakides, EM Dec. 00, p1232-1239.

Flow in Helical Annular Pipe, JinSuo Zhang, BenZhao Zhang and HuaJun Chen, EM Oct. 00, p1040-1047.

Plastic Deformations of Impulsively Loaded, Rigid-Plastic Beams, Michelle S. Hoo Fatt, Yi Liu and Z. Brandon Wang, EM Feb. 00, p157-165.

Elastic-Plastic Model of Pinned Beams Subjected to Impulsive Loading, M. K. Boutros, EM Sept. 00, p920-927.

Bending of Sector Plates on Elastic Foundations by Bes-sel Functions, You-He Zhou, Jianping Zhang and Xiao Jing Zheng, EM June 00, p653-655.

Bending Solutions of Sectorial Mindlin Plates from Kir-chhoff Plates, C. M. Wang and G. T. Lim, EM Apr. 00,

Green's Function for Mixed Boundary Value Problem of Thin Plate, Xian-Feng Wang and Norio Hasebe, EM Aug. 00, p787-794.

Green's Functions of Think Plate Bending Problem under Fixed Boundary. Norio Hasebe and Xian-Feng Wang, EM Feb. 00, p206-213.

LES and RANS Studies of Oscillating Flows over Flat Plate, Chin-Tsau Hsu, Xiyun Lu and Man-Kim Kwan, EM Feb. 00, p186-190.

Modeling Interactive Buckling of Plate Structures Using Special Elements, Srinivasan Sridharan and Madjid Zeggane, EM Dec. 00, p1247-1256.

Nonlinear Analysis of Moderately Thick Laminated Rec-tangular Plates, K. K. Shukla and Y. Nath, EM Aug. 00, p831-838.

Perforated Wall Breakwater with Internal Horizontal Plate, T. L. Yip and Allen T. Chwang, EM May 00, p533-538.

Probabilistic Failure Analysis of Transversely Loaded Laminated Composite Plates Using First-Order Second Moment Method, S. C. Lin and T. Y. Kam, EM Aug.

Short-Wave and Wave Group Scattering by Submerged Porous Plate. Maria da Graça Neves, Iñigo J. Losada Porous Plate, Maria da Graça Neves, Iñigo J. L and Miguel A. Losada, EM Oct. 00, p1048-1056.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. I: Theory, Zdeněk P. Bažant and Through Cracks. I: Theory, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 38, p1310-1315.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. II: Results, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1316-1324.

Stability Analysis of Composite-Plate Foundation Inter-action by Mixed FEM, Ali N. Doğruoğlu and Mehmet H. Omurtag, EM Sept. 00, p928-938.

Study of Edge-Zone Equation of Mindlin-Reissner Plate Theory, Asghar Nosier, Arash Yavari and Shahram Sarkani, EM June 00, p647-651.

Thermal Postbuckling of Preloaded Shear Deformable Laminated Plates, Hui-Shen Shen, EM May 00, p488-

Thermoelastic Stability of Two Bonded Half Planes, Derek T. Schade, Kevin Oditt and Dale G. Karr, P.E., EM Sept. 00, p981-985.

Trapping and Generation of Waves by Vertical Porous Structures, T. Sahoo, M. M. Lee and A. T. Chwang, EM Oct. 00, p1074-1082.

Vibration and Stability of Thick Plates on Elastic Foun-dations, Hiroyuki Matsunaga, EM Jan. 00, p27-34.

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1020-1026.

# Pore water pressure

Water Migration Phenomenon in Concrete in Postpeak Region, Hideki Oshita and Tada-aki Tanabe, EM June 00, p573-581.

Water Migration Phenomenon in Concrete in Prepeak Region, Hideki Oshita and Tada-aki Tanabe, EM June 00, p565-572.

### Pornelasticity

Dynamic Response of Soft Poroelastic Bed to Nonlinear Water Wave— Boundary Layer Correction Approach, P. C. Hsieh, L. H. Huang and T. W. Wang, EM Oct. 00, p1064-1073.

Laminar Poroelastic Media Flow, C. H. Song and L. H. Huang, EM Apr. 00, p358-366.

Perforated Wall Breakwater with Internal Horizontal Plate, T. L. Yip and Allen T. Chwang, EM May 00, p533-538.

### Porous materials

Short-Wave and Wave Group Scattering by Submerged Porous Plate, Maria da Graça Neves, Iñigo J. Losada and Miguel A. Losada, EM Oct. 00, p1048-1056.

Trapping and Generation of Waves by Vertical Porous Structures, T. Sahoo, M. M. Lee and A. T. Chwang, EM Oct. 00, p1074-1082.

# Porous media

Dynamic Response of Soft Poroelastic Bed to Nonlinear Water Wave— Boundary Layer Correction Approach, P. C. Hsieh, L. H. Huang and T. W. Wang, EM Oct. 00, p1064-1073.

Laminar Poroelastic Media Flow, C. H. Song and L. H. Huang, EM Apr. 00, p358-366.

Poro-Damage Approach Applied to Hydro-Fracture Analysis of Concrete, Benoît Bary, Jean-Pierre Bour-nazel and Eric Bourdarot, EM Sept. 00, p937-943.

Propagation Fronts During Calcium Leaching and Chlo-ride Penetration, Marc Mainguy and Olivier Coussy, EM Mar. 00, p250-257.

## Postbuckling behavior

Nonlinear Buckling and Postbuckling of Cable-Stiffened Prestressed Domes. Vinasithamby Ragavan and Amde M. Amde (formerly Amde M. Wolde-Tinsae), EM Oct. 99, p1164-1172.

Thermal Postbuckling of Preloaded Shear Deformable Laminated Plates, Hui-Shen Shen, EM May 00, p488-

Turbulent Boundary Layer over Symmetric Bodies with Rigid and Flexible Surfaces, M. S. Abu Sharekh, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Apr. 00, p422-431.

# Prestressing

Nonlinear Buckling and Postbuckling of Cable-Stiffened Prestressed Domes, Vinasithamby Ragavan and Amde M. Amde (formerly Amde M. Wolde-Tinsae), EM Oct. 99, p1164-1172.

# Probabilistic methods

Bayesian Probabilistic Approach to Structural Health Monitoring, M. W. Vanik, J. L. Beck and S. K. Au, EM July 00, p738-745.

Characterization of Random Composites Using Moving-Window Technique, S. C. Baxter and L. L. Graham, EM Apr. 00, p389-397.

Probabilistic Failure Analysis of Transversely Loaded Laminated Composite Plates Using First-Order Second Moment Method, S. C. Lin and T. Y. Kam, EM Aug.

Unified Approach to Probabilistic and Possibilistic Analysis of Uncertain Systems, R. S. Langley, EM Nov. 00,

Entropy and Granular Materials: Model, Colin B. Brown, EM June 00, p599-604.

New Point Estimates for Probability Moments, Yan-Gang Zhao and Tetsuro Ono, EM Apr. 00, p433-436.

Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. I: Theory, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p166-174.

Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. II: Application, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p175-185.

Pullout Response of a Smooth Fiber with an End Anchorage, C. Sujivorakul, A. M. Waas and A. E. Naaman, EM Sept. 00, p986-993.

# Pulse generators

Active Pulse Structural Control Using Artificial Neural Networks, Shih-Lin Hung, C. Y. Kao and J. C. Lee, EM Aug. 00, p839-849.

Transient Behavior of Complex Aeraulic or Hydraulic Networks Including Centrifugal Fans or Pumps, G. Mariaux and Y. Gervais, EM Nov. 00, p1180-1188.

### Radar

Damage Detection in Urban Areas by SAR Imagery, Masanobu Shinozuka, Roger Ghanem, Bijan Housh-mand and Babak Mansouri, EM July 00, p769-777.

Vibration of Vehicle on Compressed Rail on Viscoelastic Foundation, D. Y. Zheng, F. T. K. Au and Y. K. Cheung, EM Nov. 00, p1141-1147.

- Characterization of Random Composites Using Moving-Window Technique, S. C. Baxter and L. L. Graham, EM Apr. 00, p389-397.
- Optimal Nonlinear Stochastic Control of Hysteretic Systems, W. Q. Zhu, Z. G. Ying, Y. Q. Ni and J. M. Ko, EM Oct. 00, p1027-1032.

# Random variables

- Conditional Simulation of a Class of Nonstationary Space-Time Random Fields, E. Heredia-Zavoni and S. Santa-Cruz, EM Apr. 00, p398-404.
- Direct Generation of Non-Gaussian Weighted Integrals, R. C. Micaletti, EM Jan. 00, p66-75.
- New Point Estimates for Probability Moments, Yan-Gang Zhao and Tetsuro Ono, EM Apr. 00, p433-436.
- Probabilistic Failure Analysis of Transversely Loaded Laminated Composite Plates Using First-Order Second Moment Method, S. C. Lin and T. Y. Kam, EM Aug. 00, p812-820.

### Random vibration

- Aerodynamic Coupling Effects on Flutter and Buffeting of Bridges, Xinzhong Chen, Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p17-26.
- Pitfalls of Deterministic and Random Analyses of Systems with Hysteresis, P. D. Spanos and B. A. Zelden, EM Oct. 00, p1108-1110.
- Semi-Explicit Random Response and Sensitivity of Sim-ple SSI System, Izuru Takewaki, EM Feb. 00, p219-222.
- Simultaneous Estimation of System and Input Parameters from Output Measurements, Tinghui Shi, Nicholas P. Jones and J. Hugh Ellis, EM July 00, p746-753.
- Time Domain Flutter and Buffeting Response Analysis of Bridges, Xinzhong Chen, Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p7-16.

Fracturing Rate Effect and Creep in Microplane Model for Dynamics, Zdeněk P. Bažant, Ferhun C. Caner, Mark D. Adley and Stephen A. Akers, EM Sept. 00, p962-970.

# Rayleigh waves

- Effect of Aggregate Size on Attenuation of Rayleigh Surface Waves in Cement-Based Materials, Laurence J. Jacobs and Joseph O. Owino, EM Nov. 00, p1124-
- Ultrasonic Monitoring of Material Degradation in FRP Composites, Olajide D. Dokun, Laurence J. Jacobs and Rami M. Haj-Ali, EM July 00, p704-710.

# Real-time programming

Bench-Scale Experiment for Structural Control, M. Bat-taini, G. Yang and B. F. Spencer, Jr., EM Feb. 00,

# Rectangular hollow sections

Simulation of Dynamic Liquid Pressure for Tuned Liquid Damper, Hong-Nan Li, Y. Jia and Jing Lu, EM Dec. 00, p1303-1305.

Closed-Form Solution for Reinforced Timoshenko Beam on Elastic Foundation, Jian-Hua Yin, EM Aug. 00,

Analysis and Implementation of Resilient Modulus Models for Granular Solids, K. D. Hjelmstad and E. Taciro-glu, EM Aug. 00, p821-830.

# Response spectra

- Model for Dynamic Analysis of Wood Frame Shear Walls, David W. Dinehart and Harry W. Shenton, III, EM Sept. 00, p899-908.
- Response of Damped Oscillators to Cycloidal Pulses, Nicos Makris and Shih-Po Chang, EM Feb. 00, p123-

Boundary Integral Equations for Solids and Fluids by Marc Bonnet, George D. Manolis, EM Jan. 00, p120-

Grain Boundary Migration in Metals: Thermodynamics, Kinetics, Applications by G. Gottstein and L. S. Shvindlerman, George Z. Voyaidjis, EM Aug. 00,

## Rigid pipes

Instability of Thin Pipes Encased in Oval Rigid Cavity, Abdel-Aziz M. Omara, P.E., Leslie K. Guice, P.E., W. Thomas Straughan, P.E. and Fred Akl, P.E., EM Apr. 00, p381-388

### Rigid-body dynamics

- Plastic Deformations of Impulsively Loaded, Rigid-Plastic Beams, Michelle S. Hoo Fatt, Yi Liu and Z. Brandon Wang, EM Feb. 00, p157-165.
- Turbulent Boundary Layer over Symmetric Bodies with Rigid and Flexible Surfaces, M. S. Abu Shareka, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Apr. 00, p422-431

- Delamination Buckling and Growth in Rings under Pressure, Sami El-Sayed and Srinivasan Sridharan, EM Oct. 00, p1033-1039.
- Flow in Helical Annular Pipe, JinSuo Zhang, BenZhao Zhang and HuaJun Chen, EM Oct. 00, p1040-1047.

Adjoint Sensitivity Analysis for Shallow-Water Wave Control, Brett F. Sanders and Nikolaos D. Katopodes, EM Sept. 00, p909-919.

- General Carryover Matrix of Plane Rod Loaded Perpendicular to Its Plane, R. Artan, EM Aug. 00, p875-878.
- General Thin Rod Model for Preslip Bending Response of Strand, S. Sathikh, S. Rajasekaran, Jayakumar and C. Jaberaj, EM Feb. 00, p132-139.

# Rotation

Generalized Differential Quadrature for Frequency of Rotating Multilayered Conical Shell, Khin-Yong Lam and Li Hua, EM Nov. 00, p1156-1162.

### Sandwich structures

- Solution of Circular Sandwich Ring under Two Forces Acting along Diameter, S. T. Mau and X. Tao, EM Apr. 00, p348-357.
- Thermoelastic Stability of Two Bonded Half Planes, Derek T. Schade, Kevin Oditt and Dale G. Karr, P.E., EM Sept. 00, p981-985.

Flow in Helical Annular Pipe, JinSuo Zhang, BenZhao Zhang and HuaJun Chen, EM Oct. 00, p1040-1047.

# Seismic analysis

- Nonlinear Sliding Mode Control of Seismic Response of Building Frames, S. Sarbjeet and T. K. Datta, EM Apr. 00, p340-347.
- Nonlinear Static Procedure for Fragility Curve Development, Masanobu Shinozuka, Maria Q. Feng, Ho-Kyung Kim and Sang-Hoon Kim, EM Dec. 00, p1287-1295.

# Seismic design

Soil Spring Constants of Buried Pipelines for Seismic Design, Katsumi Matsubara and Masaru Hoshiya, EM Jan. 00, p76-83.

Deterministic Control of Column under Horizontal-Vertical Excitation, Seshasayee Ankireddi and Henry T. Y. Yang, EM Apr. 00, p373-380.

# Seismic response

- Semiactive Control Strategies for MR Dampers: Comparative Study, Laura M. Jansen and Shirley J. Dyke, EM Aug. 00, p795-803.
- Structural Identification of Frames under Earthquake Loading—Time Domain Identification Algorithms. Chin-Hsiung Loh, Chi-Ying Lin and Chih-Chieh Huang, EM July 00, p693-703.

Model for Dynamic Analysis of Wood Frame Shear Walls, David W. Dinehart and Harry W. Shenton, III, EM Sept. 00, p899-908.

# Sensitivity analysis

- Adjoint Sensitivity Analysis for Shallow-Water Wave Control, Brett F. Sanders and Nikolaos D. Katopodes, EM Sept. 00, p909-919.
- Damage Localization by Directly Using Incomplete Mode Shapes, Z. Y. Shi, S. S. Law and L. M. Zhang, EM June 00, p656-660.

- Optimum Sensor Placement for Structural Damage Detection, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Nov. 00, p1173-1179.
- Semi-Explicit Random Response and Sensitivity of Simple SSI System, Izuru Takewaki, EM Feb. 00. p219-222.
- Structural Damage Detection from Modal Strain Energy Change, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Dec. 00, p1216-1223.

- Debonding and Calibration Shift of Optical Fiber Sensors in Concrete, Christopher K. Y. Leung, Xinyang Wang and Noah Olson, EM Mar. 00, p300-307.
- Optimum Sensor Placement for Structural Damage Detection, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Nov. 00, p1173-1179.

Adjoint Sensitivity Analysis for Shallow-Water Wave Control, Brett F. Sanders and Nikolaos D. Katopodes, EM Sept. 00, p909-919.

Damage Localization by Directly Using Incomplete Mode Shapes, Z. Y. Shi, S. S. Law and L. M. Zhang, EM June 00, p656-660.

### Shear deformation

- Bending Solutions of Sectorial Mindlin Plates from Kir-chhoff Plates, C. M. Wang and G. T. Lim, EM Apr. 00,
- Buckling of Delaminated Composite Beams with Shear Deformation Effect, Izhak Sheinman and Yeoshua Frostig, EM Nov. 00, p1148-1155.
- Buckling of Long Orthotropic Plates Including Higher-Order Transverse Shear, Ulf Nyman and Per Johan Gustafsson, EM Dec. 00, p1209-1215.
- Nonlinear Analysis of Moderately Thick Laminated Rectangular Plates, K. K. Shukla and Y. Nath, EM Aug. 00, p831-838.
- Thermal Postbuckling of Preloaded Shear Deformable Laminated Plates, Hui-Shen Shen, EM May 00, p488-

# Shear lag

Shear Lag of Thin-Walled Curved Box Girder Bridges, Q. Z. Luo and Q. S. Li, EM Oct. 00, p1111-1114.

- Response of Inhomogeneous Seabed around Buried Pipe-line under Ocean Waves, D. S. Jeng and Y. S. Lin, EM Apr. 00, p321-332.
- Soil Spring Constants of Buried Pipelines for Seismic Design, Katsumi Matsubara and Masaru Hoshiya, EM Jan. 00, p76-83.

Model for Dynamic Analysis of Wood Frame Shear Walls, David W. Dinehart and Harry W. Shenton, III, EM Sept. 00, p899-908.

- Modeling of Early-Age Creep of Shotcrete. I: Model and Model Parameters, Jérôme Sercombe, Christian Hellmich, Franz-Josef Ulm and Herbert Mang, EM Mar. 00, p284-291
- Modeling of Early-Age Creep of Shotcrete. II: Applica-tion to Tunneling, Christian Hellmich, Jérôme Ser-combe, Franz-Josef Ulm and Herbert Mang, EM Mar. 00, p292-299.

# Shrinkage

- Influence of Reinforcing Bars on Shrinkage Stresses in Concrete Slabs, Jun Zhang, Victor C. Li and Cynthia Wu, EM Dec. 00, p1297-1300.
- Predicting Shrinkage Stress Field in Concrete Slab on Elastic Subgrade, Wei Yang, W. Jason Weiss and Surendra P. Shah, EM Jan. 00, p35-42.

# Shrinkage cracking

Influence of Specimen Size/Geometry on Shrinkage Cracking of Rings, W. Jason Weiss, Wei Yang and Surendra P. Shah, EM Jan. 00, p93-101.

Alkali-Silica Reaction of Concretes with Admixtures of Concrete, Zongjing Li, Bin Mu and Jun Peng, EM Mar. 00, p243-249.

Compression Tests on Cylinders with Circumferential Weld Depressions, P. A. Berry, J. M. Rotter and R. Q. Bridge, EM Apr. 00, p405-413.

## Simulation

Conditional Simulation of a Class of Nonstationary Space-Time Random Fields, E. Heredia-Zavoni and S. Santa-Cruz, EM Apr. 00, p398-404.

Simulation of Stochastic Wind Velocity Field on Long-Span Bridges, Yinghong Cao, Haifan Xiang and Ying Zhou, EM Jan. 00, p1-6.

Influence of Specimen Size/Geometry on Shrinkage Cracking of Rings, W. Jason Weiss, Wei Yang and Surendra P. Shah, EM Jan. 00, p93-101.

Effect of Block Size and Joint Geometry on Jointed Rock Hydraulics and REV, P. H. S. W. Kulatilake and Bi-bhuti B. Panda, EM Aug. 00, p850-858.

Fracture Mechanics of ASR in Concretes with Waste Glass Particles of Different Sizes, Zdeněk P. Bažant, Goangseup Zi and Christian Meyer, EM Mar. 00, p226-232.

Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. I: Theory, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p166-174.

Probabilistic Nonlocal Theory for Quasibrittle Fracture Initiation and Size Effect. II: Application, Zdeněk P. Bažant and Drahomír Novák, EM Feb. 00, p175-185.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. I: Theory, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1310-1315.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. II: Results, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1316-1324.

Observations on Flow around Bridge Abutment, Ferdous Ahmed and N. Rajaratnam, EM Jan. 00, p51-59.

Nonlinear Sliding Mode Control of Seismic Response of Building Frames, S. Sarbjeet and T. K. Datta, EM Apr. 00, p340-347.

Pullout Response of a Smooth Fiber with an End Anchorage, C. Sujivorakul, A. M. Waas and A. E. Naaman, EM Sept. 00, p986-993.

Soil Spring Constants of Buried Pipelines for Seismic Design, Katsumi Matsubara and Masaru Hoshiya, EM

Response of Inhomogeneous Seabed around Buried Pipe-line under Ocean Waves, D. S. Jeng and Y. S. Lin, EM Apr. 00, p321-332.

# Soil-pile interaction

Semi-Explicit Random Response and Sensitivity of Sim-ple SSI System, Izuru Takewaki, EM Feb. 00, p219-222.

Response of Inhomogeneous Seabed around Buried Pipe-line under Ocean Waves, D. S. Jeng and Y. S. Lin, EM Apr. 00, p321-332.

# Soils, unsaturated

Finite Analytic Model for Flow and Transport in Unsaturated Zone, Whey-Fone Tsai, Tim-Hau Lee, Ching-Jen Chen, Shin-Jye Liang and Chia-Chen Kuo, EM May 00, p470-479.

# Soil-structure interaction

Semi-Explicit Random Response and Sensitivity of Sim-ple SSI System, Izuru Takewaki, EM Feb. 00, p219-222.

Boundary Integral Equations for Solids and Fluids by Marc Bonnet, George D. Manolis, EM Jan. 00, p120-

# Sorption

Dispersion in Sediment-Laden Stream Flow, Chiu-On Ng. EM Aug. 00, p779-786.

# Space frames

Symmetry of Tangent Stiffness Matrices of 3D Elastic Frame, Lip H. Teh and Murray J. Clarke, EM Feb. 99, n248-251

Symmetry of Tangent Stiffness Matrices of 3D Elastic Frame, Lip H. Teh and Murray J. Clarke, EM Feb. 99,

### Spatial data

Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. II: Numerical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May 00, p506-514.

Three-Dimensional Elasticity Solutions of Laminated Annular Spherical Shells, Chih-Ping Wu and Jyh-Yeuan Lo, EM Aug. 00, p882-885.

Multidomain SFBEM and Its Application in Elastic Plane Problems, Cheng Su and Dajian Han, EM Oct. 00, p1057-1063.

# Stability

Integrated Procedure for Identification and Control of MDOF Structures, Vincenzo Gattulli and Francesco Romeo, EM July 00, p730-737.

Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. I: Analytical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May 00, p497-505.

Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. II: Numerical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May

Thermoelastic Stability of Two Bonded Half Planes, Derek T. Schade, Kevin Oditt and Dale G. Karr, P.E., EM Sept. 00, p981-985.

Vibration and Stability of Thick Plates on Elastic Foun-dations, Hiroyuki Matsunaga, EM Jan. 00, p27-34.

# Stability analysis

Instability of Thin Pipes Encased in Oval Rigid Cavity, Abdel-Aziz M. Omara, P.E., Leslie K. Guice, P.E., W. Thomas Straughan, P.E. and Fred Akl, P.E., EM Apr. 00, p381-388.

Second-Order Axial Deflections of Imperfect 3D Beam-Column, J. Darío Aristizabal-Ochoa, EM Nov. 00, p1201-1208.

Stability Analysis of Composite-Plate Foundation Inter-action by Mixed FEM, Ali N. Doğruoğlu and Mehmet H. Omurtag, EM Sept. 00, p928-938.

Vibration of Vehicle on Compressed Rail on Viscoelastic Foundation, D. Y. Zheng, F. T. K. Au and Y. K. Cheung, EM Nov. 00, p1141-1147.

# Static structural analysis

Exact Static Solution of Grillwork with Periodic Supports, H. C. Chan, C. W. Cai and J. K. Liu, EM May 00, p480-487.

Nonlinear Static Procedure for Fragility Curve Development, Masanobu Shinozuka, Maria Q. Feng, Ho-Kyung Kim and Sang-Hoon Kim, EM Dec. 00, p1287-1295.

# Statistical analysis

Statistical Analysis of Fragility Curves, Masanobu Shino-zuka, M. Q. Feng, Jongheon Lee and Toshihilo Naganuma, EM Dec. 00, p1224-1231.

Statistical Damage Assessment of Framed Structures from Static Responses, Inho Yeo, Soobong Shin, Hae Sung Lee and Sung-Pil Chang, EM Apr. 00, p414-421.

Unified Approach to Probabilistic and Possibilistic Anal-ysis of Uncertain Systems, R. S. Langley, EM Nov. 00, p1163-1172.

Green's Functions for Two-and-a-Half-Dimensional Elastodynamic Problems, António J. B. Tadeu and Eduardo Kausel, EM Oct. 00, p1093-1097.

Multicomponent Model of Reinforced Concrete Joints for Cyclic Loading, F. Fleury, J.-M. Reynouard and O. Merabet, EM Aug. 00, p804-811.

Direct Numerical Procedure for Solution of Moving Oscillator Problems, B. Yang, C. A. Tan and L. A. Bergman, EM May 00, p462-469.

Hysteretic Models for Deteriorating Inelastic Structures. Mettupalayam V. Sivaselvan and Andrei M. Reinhorn. EM June 00, p633-640.

Stiffness Evaluation and Damage Detection of Ceramic Candle Filters, Hung-Liang "Roger" Chen and Alejan-dro C. Kiriakidis, EM Mar. 00, p308-319.

Updating Structural System Parameters Using Frequency Response Data, Philip D. Cha and James P. Tuck-Lee, EM Dec. 00, p1240-1246.

### Stiffness coefficients

Transient Dynamics of Stochastically Parametered Beams, Sondipon Adhikari and C. S. Manohar, EM Nov. 00, p1131-1140.

Symmetry of Tangent Stiffness Matrices of 3D Elastic Frame, Lip H. Teh and Murray J. Clarke, EM Feb. 99, p248-251

Unsymmetrically Loaded Cylindrical Tank on Elastic Foundation, Moon-Hee Nam and Kwan-Hee Lee, EM Dec. 00, p1257-1261.

## Stochastic processes

Closed Loop Predictive Optimal Control Algorithm Using ARMA Models, Ali Keyhani and Mehter Mohamed Allam, EM June 00, p620-625.

Direct Generation of Non-Gaussian Weighted Integrals, R. C. Micaletti, EM Jan. 00, p66-75.

New Light on Response of Linear Systems Subjected to Random Nonstationary Filtered Inputs, G. Falsone, EM Dec. 00, p1273-1286.

Optimal Nonlinear Stochastic Control of Hysteretic Systems, W. Q. Zhu, Z. G. Ying, Y. Q. Ni and J. M. Ko, EM Oct. 00, p1027-1032.

Phase Space Reduction in Stochastic Dynamics, M. Vasta and G. I. Schuëller, EM June 00, p626-632.

Simulation of Stochastic Wind Velocity Field on Long-Span Bridges, Yinghong Cao, Haifan Xiang and Ying Zhou, EM Jan. 00, p1-6.

Transient Dynamics of Stochastically Parametered Beams, Sondipon Adhikari and C. S. Manohar, EM Nov. 00, p1131-1140.

Weighted Integral SFEM Including Higher Order Terms, Chang-Koon Choi and Hyuk-Chun Noh, EM Aug. 00, p859-866.

Wind-Induced Peak Bending Moments in Low-Rise Building Frames, Massimiliano Gioffrè, Mircea Gri-goriu, Michael Kasperski and Emil Simiu, EM Aug. 00, p879-881.

Axisymmetric Wrinkling of Cylinders with Finite Strain, Ralf Peek, EM May 00, p455-461.

Development of Four-Node Membrane Element Containing Central Circular Hole, A. K. Soh and Z. F. Long, EM Nov. 00, p1115-1119.

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. I: Theory, George Z. Voyiadjis and Chung R. Song, EM Oct. 00, p1012-1019.

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test, George Z. Voyiadjis and Chung R. Song, EM Oct. 00,

Large-Strain Generalization of Microplane Model for Concrete and Application, Zdenek P. Bažant, Mark D. Adley, Ignacio Carol, Milan Jirásek, Stephen A. Akers, Bob Rohani, J. Donald Cargile and Ferhun C. Caner, EM Sept. 00, p971-980.

Material Constitutive Law for Large Strains and Strain Rates, M. Alves, EM Feb. 00, p215-218.

Microplane Model M4 for Concrete. I: Formulation with Work-Conjugate Deviatoric Stress, Zdeněk Bažant, Ferhun C. Caner, Ignacio Carol, Mark D. Ad-ley and Stephen A. Akers, EM Sept. 00, p944-953.

Structural Damage Detection from Modal Strain Energy Change, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Dec. 00, p1216-1223.

Elastic-Plastic Model of Pinned Beams Subjected to Impulsive Loading, M. K. Boutros, EM Sept. 00, p920-927.

Material Constitutive Law for Large Strains and Strain Rates, M. Alves, EM Feb. 00, p215-218.

# Strain softening

Fracturing Rate Effect and Creep in Microplane Model for Dynamics, Zdeněk P. Bažant, Ferhun C. Caner, Mark D. Adley and Stephen A. Akers, EM Sept. 00,

Large-Strain Generalization of Microplane Model for Concrete and Application, Zdeněk P. Bažant, Mark D. Adley, Ignacio Carol, Milan Jirásek, Stephen A. Akers, Bob Rohani, J. Donald Cargile and Ferhun C. Caner, EM Sept. 00, p971-980.

Microplane Model M4 for Concrete. I: Formulation with Work-Conjugate Deviatoric Stress, Zdenkk Bažant, Ferhun C. Caner, Ignacio Carol, Mark D. Ad-ley and Stephen A. Akers, EM Sept. 00, p944-953.

Microplane Model M4 for Concrete. II: Algorithm and Calibration, Ferhun C. Caner and Zdeněk P. Bažant, EM Sept. 00, p954-961.

Performance Evaluation of Elastoviscoplastic Concrete Model, Hong D. Kang and Kaspar J. William, EM Sept. 00, p995-1000.

### Stratified flow

BIEM Modeling of 3D Circulation and Transport in Stratified Estuaries, D. L. Young, B. C. Her and T. I. Eldho, EM Oct. 00, p1083-1092.

Hysteretic Models for Deteriorating Inelastic Structures, Mettupalayam V. Sivaselvan and Andrei M. Reinhorn, EM June 00, p633-640.

Development of Four-Node Membrane Element Containing Central Circular Hole, A. K. Soh and Z. F. Long, EM Nov. 00, p1115-1119.

Microplane Model M4 for Concrete. I: Formulation with Work-Conjugate Deviatoric Stress, Zdenek Bažant, Ferhun C. Caner, Ignacio Carol, Mark D. Ad-ley and Stephen A. Akers, EM Sept. 00, p944-953.

Torsional Surface Waves in Nonhomogeneous Anisotropic Medium under Initial Stress, S. Dey, A. K. Gupta, S. Gupta and A. M. Prasad, EM Nov. 00, p1120-1123

Two Tangential Forces and a Penny-Shaped Crack: a Complete Solution, V. I. Fabrikant, EM Jan. 00, p102-

Green's Function for Mixed Boundary Value Problem of Thin Plate, Xian-Feng Wang and Norio Hasebe, EM Aug. 00, p787-794.

Predicting Shrinkage Stress Field in Concrete Slab on Elastic Subgrade, Wei Yang, W. Jason Weiss and Surendra P. Shah, EM Jan. 00, p35-42.

### Stress strain relations

Application of Lade's Criterion to Cam-Clay Model, Yang-Ping Yao and De'An Sun, EM Jan. 00, p112-119.

### Structural analysis

Application of Neural Networks for Detection of Changes in Nonlinear Systems, S. F. Masri, A. W. Smyth, A. G. Chassiakos, T. K. Caughey and N. F. Hunter, EM

Damage Detection in Beam Structures Based on Fre-quency Measurements, Fabrizio Vestroni and Danilo Capecchi, EM July 00, p761-768.

Damage Identification Using Committee of Neural Net-works, Tshilidzi Marwała, EM Jan. 00, p43-50.

Damage Localization by Directly Using Incomplete Mode Shapes, Z. Y. Shi, S. S. Law and L. M. Zhang, EM June 00, p656-660.

Optimum Sensor Placement for Structural Damage D tection, Z. Y. Shi, S. S. Law and L. M. Zhang, EM Nov. 00, p1173-1179.

Tracing Secondary Equilibrium Paths of Elastic Framed Structures, Lip H. Teh and Murray J. Clarke, EM Dec. 99, p1358-1364.

Updating Structural System Parameters Using Frequency Response Data, Philip D. Cha and James P. Tuck-Lee, EM Dec. 00, p1240-1246.

# Structural control

Active Pulse Structural Control Using Artificial Neural Networks, Shih-Lin Hung, C. Y. Kao and J. C. Lee, EM Aug. 00, p839-849.

Bench-Scale Experiment for Structural Control, M. Bat-taini, G. Yang and B. F. Spencer, Jr., EM Feb. 00,

Nonlinear Sliding Mode Control of Seismic Response of Building Frames, S. Sarbjeet and T. K. Datta, EM Apr. 00, p340-347.

Optimal Structural Control Using Neural Networks, Ju-Tac Kim, Hyung-Jo Jung and In-Won Lee, EM Feb. 00, p201-205.

# Structural dynamics

Integrated Procedure for Identification and Control of MDOF Structures, Vincenzo Gattulli and Francesco Romeo, EM July 00, p730-737.

# Structural failures

Wavelet-Based Approach for Structural Damage Detec-tion, Z. Hou, M. Noori and R. St. Amand, EM July 00,

### Structural models

Bayesian Probabilistic Approach to Structural Health Monitoring, M. W. Vanik, J. L. Beck and S. K. Au, EM July 00, p738-745.

Hysteretic Models for Deteriorating Inelastic Structures, Mettupalayam V. Sivaselvan and Andrei M. Reinhorn, EM June 00, p633-640.

# Structural reliability

Editorial, Roger Ghanem and Stein Sture, EM July 00, p665.

Limit-State Surface Element Method: Application to Fatigue Reliability with NDE Inspections, B. Moran, Y. Xu and J. D. Achenbach, EM July 00, p684-692.

Unified Approach to Probabilistic and Possibilistic Analysis of Uncertain Systems, R. S. Langley, EM Nov. 00, p1163-1172

# Structural safety

Bayesian Probabilistic Approach to Structural Health Monitoring, M. W. Vanik, J. L. Beck and S. K. Au, EM July 00, p738-745.

Issues in Infrastructure Health Monitoring for Management, A. E. Aktan, F. N. Catbas, K. A. Grimmelsman and C. J. Tsikos, EM July 00, p711-724.

## Structural stability

Statistical Analysis of Fragility Curves, Masanobu Shino-zuka, M. Q. Feng, Jongheon Lee and Toshihilo Naganuma, EM Dec. 00, p1224-1231.

### Structure reinforcement

Unilateral Buckling Restrained by Initial Force Supports, Wayne M. Falk and Sanjay Govindjee, EM Dec. 00. p1301-1302.

### Structures

Editorial, Roger Ghanem and Stein Sture, EM July 00, p665.

### Submarine pipelines

Response of Inhomogeneous Seabed around Buried Pipe-line under Ocean Waves, D. S. Jeng and Y. S. Lin, EM Apr. 00, p321-332.

### Submerged iets

Numerical Simulation of Advected Thermal Using Gaussian-Vortex Model, Jaehyung Lee and II Won Seo, EM Oct. 00, p1098-1106.

# Substructures

Analytical Solution for Plane Trusses with Equidistant Supports, C. W. Cai, H. C. Chan and J. K. Liu, EM Apr. 00, p333-339.

# Subsurface flow

Finite Analytic Model for Flow and Transport in Unsaturated Zone, Whey-Fone Tsai, Tim-Hau Lee, Ching-Jen Chen, Shin-Jye Liang and Chia-Chen Kuo, EM May 00, p470-479.

# Supports

Analytical Solution for Plane Trusses with Equidistant Supports, C. W. Cai, H. C. Chan and J. K. Liu, EM Apr. 00, p333-339.

Derivative of Buckling Load with Respect to Support Lo-cations, Zhong-Sheng Liu, Hai-Chang Hu and Cheng Huang, EM June 00, p559-564.

Exact Static Solution of Grillwork with Periodic Supports, H. C. Chan, C. W. Cai and J. K. Liu, EM May 00, p480-487.

Unilateral Buckling Restrained by Initial Force Supports, Wayne M. Falk and Sanjay Govindjee, EM Dec. 00. p1301-1302.

Effect of Aggregate Size on Attenuation of Rayleigh Surface Waves in Cement-Based Materials, Laurence J. Jacobs and Joseph O. Owino, EM Nov. 00, p1124-1130.

Torsional Surface Waves in Nonhomogeneous Aniso-tropic Medium under Initial Stress, S. Dey, A. K. Gup-ta, S. Gupta and A. M. Prasad, EM Nov. 00, p1120-

# Suspended sediments

Dispersion in Sediment-Laden Stream Flow, Chiu-On Ng, EM Aug. 00, p779-786.

Theory of Combined Sway and Nonsway Frames Buck-ling, P. Lokkas and J. G. A. Croll, EM Jan. 00, p84-92.

Symmetry of Tangent Stiffness Matrices of 3D Elastic Frame, Lip H. Teh and Murray J. Clarke, EM Feb. 99, p248-251.

# Systems

Pitfalls of Deterministic and Random Analyses of Systems with Hysteresis, P. D. Spanos and B. A. Zelden, EM Oct. 00, p1108-1110.

Simultaneous Estimation of System and Input Parameters from Output Measurements, Tinghui Shi, Nicholas P. Jones and J. Hugh Ellis, EM July 00, p746-753.

Updating Structural System Parameters Using Frequency Response Data, Philip D. Cha and James P. Tuck-Lee, EM Dec. 00, p1240-1246.

Compression Tests on Cylinders with Circumferential Weld Depressions, P. A. Berry, J. M. Rotter and R. Q. Bridge, EM Apr. 00, p405-413.

# Temperature effects

Thermal Postbuckling of Preloaded Shear Deformable Laminated Plates, Hui-Shen Shen, EM May 00, p488-

### Tension

Element-Free Galerkin Simulations of Concrete Failure in Dynamic Uniaxial Tension Test, Leonard E. Schwer, Charles Gerlach and Ted Belytschko, EM May 00, p443-454.

Bending Solutions of Sectorial Mindlin Plates from Kir-chhoff Plates, C. M. Wang and G. T. Lim, EM Apr. 00,

Study of Edge-Zone Equation of Mindlin-Reissner Plate Theory, Asghar Nosier, Arash Yavari and Shahram Sarkani, EM June 00, p647-651.

## Thermal diffusion

Thermo-Chemo-Mechanics of ASR Expansion in Concrete Structures, Franz-Josef Ulm, Olivier Coussy, Li Kefei and Catherine Larive, EM Mar. 00, p233-242.

Grain Boundary Migration in Metals: Thermodynamics, Kinetics, Applications by G. Gottstein and L. S. Shvindlerman, George Z. Voyaidjis, EM Aug. 00,

Thermodynamic Damage Model for Composite Under Severe Loading, S. K. Naboulsi and A. N. Palazotto, EM Oct. 00, p1001-1011.

# Thermoelasticity

Thermoelastic Stability of Two Bonded Half Planes, Derek T. Schade, Kevin Oditt and Dale G. Karr, P.E., EM Sept. 00, p981-985.

# Thickness

Vibration and Stability of Thick Plates on Elastic Foun-dations, Hiroyuki Matsunaga, EM Jan. 00, p27-34.

Modeling Interactive Buckling of Plate Structures Using Special Elements. Srinivasan Sridharan and Madjid Zeggane, EM Dec. 00, p1247-1256.

Shear Lag of Thin-Walled Curved Box Girder Bridges, Q. Z. Luo and Q. S. Li, EM Oct. 00, p1111-1114.

Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. I: Analytical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May 00, p497-505.

Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. II: Numerical Approach, Moon-Young Kim, Byoung-Cheol Min and Myung-Won Suh, EM May

# Three-dimensional analysis

Buckling Analysis of Angle-Ply Multilaminated Long Hollow Cylinders, Jianqiao Ye, EM Aug. 99, p964-

Fracturing Rate Effect and Creep in Microplane Model for Dynamics, Zdeněk P. Bažant, Ferhun C. Caner, Mark D. Adley and Stephen A. Akers, EM Sept. 00, p962-970.

Green's Functions for Two-and-a-Half-Dimensional Elastodynamic Problems, António J. B. Tadeu and Eduardo Kausel, EM Oct. 00, p1093-1097.

Large-Strain Generalization of Microplane Model for Concrete and Application, Zdeněk P. Bažant, Mark D. Adley, Ignacio Carol, Milan Jirásek, Stephen A. Akers, Bob Rohani, J. Donald Cargile and Ferhun C. Caner, EM Sept. 00, p971-980.

Micropiane Model M4 for Concrete. I: Formulation with Work-Conjugate Deviatoric Stress, Zdenèk Bažant, Ferhun C. Caner, Ignacio Carol, Mark D. Ad-ley and Stephen A. Akers, EM Sept. 00, p944-953.

Microplane Model M4 for Concrete. II: Algorithm and Calibration, Ferhun C. Caner and Zdeněk P. Bažant, EM Sept. 00, p954-961.

Three-Dimensional Elasticity Solutions of Laminated Annular Spherical Shells, Chih-Ping Wu and Jyh-Yeuan Lo, EM Aug. 00, p882-885.

### Three-dimensional flow

Observations on Flow around Bridge Abutment, Ferdous Ahmed and N. Rajaratnam, EM Jan. 00, p51-59.

Three-Dimensional Mean Velocity Analysis of a 30 Degree Bend Flow, Ferdous Ahmed, EM Dec. 00, gree Bend p1262-1272.

## Three-dimensional models

BIEM Modeling of 3D Circulation and Transport in Stratified Estuaries, D. L. Young, B. C. Her and T. I. Eldho, EM Oct. 00, p1083-1092.

Time Domain Flutter and Buffeting Response Analysis of Bridges, Xinzhong Chen, Masaru Matsumoto and Ah-san Kareem, EM Jan. 00, p7-16.

Nonlinear Static Procedure for Fragility Curve Develop-ment, Masanobu Shinozuka, Maria Q. Feng, Ho-Kyung Kim and Sang-Hoon Kim, EM Dec. 00,

## Torsional oscillations

Torsional Surface Waves in Nonhomogeneous Anisotropic Medium under Initial Stress, S. Dey, A. K. Gupta, S. Gupta and A. M. Prasad, EM Nov. 00, p1120-1123.

Designing a General Neurocontroller for Water Towers, Abdolreza Joghataie and Ardalan Vahidi, EM June 00,

### Transfer functions

Semi-Explicit Random Response and Sensitivity of Simple SSI System, Izuru Takewaki, EM Feb. 00, p219-222.

Transient Dynamics of Stochastically Parametered Beams, Sondipon Adhikari and C. S. Manohar, EM Nov. 00, p1131-1140.

# Transport phenomena

BIEM Modeling of 3D Circulation and Transport in Stra-tified Estuaries, D. L. Young, B. C. Her and T. I. Eldho, EM Oct. 00, p1083-1092.

Finite Analytic Model for Flow and Transport in Unsaturated Zone, Whey-Fone Tsai, Tim-Hau Lee, Ching-Jen Chen, Shin-Jye Liang and Chia-Chen Kuo, EM May 00, p470-479.

# Transverse loads

Analytical Solution for Plane Trusses with Equidistant Supports, C. W. Cai, H. C. Chan and J. K. Liu, EM Apr. 00, p333-339.

Probabilistic Failure Analysis of Transversely Loaded Laminated Composite Plates Using First-Order Second Moment Method, S. C. Lin and T. Y. Kam, EM Aug.

Bending Solutions of Sectorial Mindlin Plates from Kir-chhoff Plates, C. M. Wang and G. T. Lim, EM Apr. 00,

Analytical Solution for Plane Trusses with Equidistant Supports, C. W. Cai, H. C. Chan and J. K. Liu, EM Apr. 00, p333-339.

# **Tuned liquid dampers**

Simulation of Dynamic Liquid Pressure for Tuned Liquid Damper, Hong-Nan Li, Y. Jia and Jing Lu, EM Dec. 00, p1303-1305.

# Tuned mass dampers

Nonlinear Sliding Mode Cortrol of Seismic Response of Building Frames, S. Sarbjeet and T. K. Datta, EM Apr. 00, p340-347.

# Tuning

Direct Numerical Procedure for Solution of Moving Os-cillator Problems, B. Yang, C. A. Tan and L. A. Berg-man, EM May 00, p462-469.

Modeling of Early-Age Creep of Shotcrete. II: Applica-tion to Tunneling. Christian Hellmich, Jérôme Ser-combe, Franz-Josef Ulm and Herbert Mang, EM Mar. (0, p.292-299.

### Turbulence

Aerodynamic Coupling Effects on Flutter and Buffeting of Bridges, Xinzhong Chen, Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p17-26.

Time Domain Flutter and Buffeting Response Analysis of Bridges, Xinzhong Chen, Masaru Matsumoto and Ah-san Kareem, EM Jan. 00, p7-16.

### Turbulent boundary layers

Observations on Flow around Bridge Abutment, Ferdous Ahmed and N. Rajaratnam, EM Jan. 00, p51-59.

Three-Dimensional Mean Velocity Analysis of a 30 Degree Bend Flow, Ferdous Ahmed, EM Dec. 00, p1262-1272.

Turbulent Boundary Layer over Symmetric Bodies with Rigid and Flexible Surfaces, M. S. Abu Sharekh, S. K. Pathak, G. L. Asawa and P. D. Porey, EM Apr. 00, n422-431

### Turbulent flow

LES and RANS Studies of Oscillating Flows over Flat Plate, Chin-Tsau Hsu, Xiyun Lu and Man-Kim Kwan, EM Feb. 00, p186-190.

### Two-dimensional analysis

Transition and Chaos in Two-Dimensional Flow Past a Square Cylinder, A. K. Saha, K. Muralidhar and G. Biswas, EM May 00, p523-532.

## Two-dimensional flow

Finite Analytic Model for Flow and Transport in Unsaturated Zone, Whey-Fone Tsai, Tim-Hau Lee, Ching-Jen Chen, Shin-Jye Liang and Chia-Chen Kuo, EM May 00, p470-479.

### Two-dimensional models

Modeling of Early-Age Creep of Shotcrete. II: Applica-tion to Tunneling, Christian Hellmich, Jérôme Ser-combe, Franz-Josef Ulm and Herbert Mang, EM Mar.

Effect of Aggregate Size on Attenuation of Rayleigh Surface Waves in Cement-Based Materials, Laurence J. Jacobs and Joseph O. Owino, EM Nov. 00, p1124-

New Directions in Concrete Health Monitoring Technology, Surendra P. Shah, John S. Popovics, Kolluru V. Subramaniam and Corina-Maria Aldea, EM July 00. ramaniam and Corina-Maria Aldea, EM July 00,

Ultrasonic Monitoring of Material Degradation in FRP Composites, Olajide D. Dokun, Laurence J. Jacobs and Rami M. Haj-Ali, EM July 00, p704-710.

# Uncertainty analysis

Unified Approach to Probabilistic and Possibilistic Anal-ysis of Uncertain Systems, R. S. Langley, EM Nov. 00, n1163-1172

# Underwater structures

Short-Wave and Wave Group Scattering by Submerged Porous Plate, Maria da Graça Neves, Iñigo J. Losada and Miguel A. Losada, EM Oct. 00, p1048-1056.

Trapping and Generation of Waves by Vertical Porous Structures, T. Sahoo, M. M. Lee and A. T. Chwang, EM Oct. 00, p1074-1082.

LES and RANS Studies of Oscillating Flows over Flat Plate, Chin-Tsau Hsu, Xiyun Lu and Man-Kim Kwan, EM Feb. 00, p186-190.

Transient Behavior of Complex Aeraulic or Hydraulic Networks Including Centrifugal Fans or Pumps, G. Mariaux and Y. Gervais, EM Nov. 00, p1180-1188.

Transition and Chaos in Two-Dimensional Flow Past a Square Cylinder, A. K. Saha, K. Muralidhar and G. Biswas, EM May 00, p523-532.

# Urban areas

Damage Detection in Urban Areas by SAR Imagery, Masanobu Shinozuka, Roger Ghanem, Bijan Housh-mand and Babak Mansouri, EM July 00, p769-777.

Response of Inhomogeneous Seabed around Buried Pipe-line under Ocean Waves, D. S. Jeng and Y. S. Lin, EM Apr. 00, p321-332.

Vibration of Vehicle on Compressed Rail on Viscoelastic Foundation, D. Y. Zheng, F. T. K. Au and Y. K. Cheung, EM Nov. 00, p1141-1147.

# Velocity profile

Observations on Flow around Bridge Abutment, Ferdous Ahmed and N. Rajaratnam, EM Jan. 00, p51-59.

Three-Dimensional Mean Velocity Analysis of a 30 Degree Bend Flow, Ferdous Ahmed, EM Dec. 00, p1262-1272.

### Vertical loads

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. I: Theory, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1310-1315.

Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. II: Results, Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1316-1324.

Direct Numerical Procedure for Solution of Moving Os-cillator Problems, B. Yang, C. A. Tan and L. A. Berg-man, EM May 00, p462-469.

Vibration and Stability of Thick Plates on Elastic Foundations, Hiroyuki Matsunaga, EM Jan. 00, p.27-34.

Vibration of Vehicle on Compressed Rail on Viscoelastic Foundation, D. Y. Zheng, F. T. K. Au and Y. K. Cheung, EM Nov. 00, p1141-1147.

Pitfalls of Deterministic and Random Analyses of Systems with Hysteresis, P. D. Spanos and B. A. Zelden, EM Oct. 00, p1108-1110.

# Vibration control

Simulation of Dynamic Liquid Pressure for Tuned Liquid Damper, Hong-Nan Li, Y. Jia and Jing Lu, EM Dec. 00, p1303-1305.

## Vibration measurement

Application of Neural Networks for Detection of Changes in Nonlinear Systems, S. F. Masri, A. W. Smyth, A. G. Chassiakos, T. K. Caughey and N. F. Hunter, EM July 00, p666-676.

## Viscoelasticity

Vibration of Vehicle on Compressed Rail on Viscoelastic Foundation, D. Y. Zheng, F. T. K. Au and Y. K. Cheung, EM Nov. 00, p1141-1147.

### Viscoplasticity

Performance Evaluation of Elastoviscoplastic Concrete Model, Hong D. Kang and Kaspar J. William, EM Sept. 00, p995-1000.

Response of Damped Oscillators to Cycloidal Pulses, Nicos Makris and Shih-Po Chang, EM Feb. 00, p123-

Numerical Simulation of Advected Thermal Using Gaussian-Vortex Model, Jaehyung Lee and Il Won Seo, EM Oct. 00, p1098-1106.

Modeling of Water Migration Phenomenon in Concrete as Homogeneous Material, Hideki Oshita and Tada-aki Tanabe, EM May 00, p551-553.

Water Migration Phenomenon Model in Cracked Con-crete. II: Calibration, Hideki Oshita and Tada-aki Tanabe, EM May 00, p544-549.

Water Migration Phenomenon Model in Cracked Concrete. I: Formulation, Hideki Oshita and Tada-aki Tanabe, EM May 00, p539-543.

# Water tanks

Designing a General Neurocontroller for Water Towers, Abdolreza Joghataie and Ardalan Vahidi, EM June 00, p582-587.

# Water waves

Dynamic Response of Soft Poroelastic Bed to Nonlinear Water Wave— Boundary Layer Correction Approach, P. C. Hsieh, L. H. Huang and T. W. Wang, EM Oct. 00, p1064-1073.

Laminar Poroelastic Media Flow, C. H. Song and L. H. Huang, EM Apr. 00, p358-366.

# Wave energy

Perforated Wall Breakwater with Internal Horizontal Plate, T. L. Yip and Allen T. Chwang, EM May 00, p533-538.

Response of Inhomogeneous Seabed around Buried Pipe-line under Ocean Waves, D. S. Jeng and Y. S. Lin, EM Apr. 00, p321-332.

Trapping and Generation of Waves by Vertical Porous Structures, T. Sahoo, M. M. Lee and A. T. Chwang, EM Oct. 00, p1074-1082.

## Wave groups

Short-Wave and Wave Group Scattering by Submerged Porous Plate, Maria da Graça Neves, Iñigo J. Losada and Miguel A. Losada, EM Oct. 00, p1048-1056.

New Directions in Concrete Health Monitoring Technology, Surendra P. Shah, John S. Popovics, Kolluru V. Subramaniam and Corina-Maria Aldea, EM July 00, p754-760.

# Wave propagation

Short-Wave and Wave Group Scattering by Submerged Porous Plate, Maria da Graça Neves, Iñigo J. Losada and Miguel A. Losada, EM Oct. 00, p1048-1056.

Torsional Surface Waves in Nonhomogeneous Anisotropic Medium under Initial Stress, S. Dey, A. K. Gupta, S. Gupta and A. M. Prasad, EM Nov. 00, p1120-1123.

### Wave reflection

Perforated Wall Breakwater with Internal Horizontal Plate, T. L. Yip and Allen T. Chwang, EM May 00, p533-538.

## Waves

Wavelet-Based Approach for Structural Damage Detec-tion, Z. Hou, M. Noori and R. St. Amand, EM July 00, p677-683.

# Weighting functions

Weighted Integral SFEM Including Higher Order Terms. Chang-Koon Choi and Hyuk-Chun Noh, EM Aug. 00, p859-866.

# Welded joints

Compression Tests on Cylinders with Circumferential Weld Depressions, P. A. Berry, J. M. Rotter and R. Q. Bridge, EM Apr. 00, p405-413.

New Light on Response of Linear Systems Subjected to Random Nonstationary Filtered Inputs, G. Falsone, EM Dec. 00, p1273-1286.

Wind-Induced Peak Bending Moments in Low-Rise Building Frames, Massimiliano Gioffrè, Mircea Gri-goriu, Michael Kasperski and Emil Simiu, EM Aug. 00, p879-881.

# Wind velocity

Simulation of Stochastic Wind Velocity Field on Long-Span Bridges, Yinghong Cao, Haifan Xiang and Ying Zhou, EM Jan. 00, p1-6.

Frictional Dissipation in Axially Loaded Simple Straight Strands, Michel Labrosse, Anne Nawrocki and Ted Conway, EM June 00, p641-646.

General Thin Rod Model for Preslip Bending Response of Strand, S. Sathikh, S. Rajasekaran, Jayakumar and C. Jaberaj, EM Feb. 00, p132-139.

# Wooden structures

Model for Dynamic Analysis of Wood Frame Shear Walls, David W. Dinehart and Harry W. Shenton, III, EM Sept. 00, p899-908.

Application of Lade's Criterion to Cam-Clay Model, Yang-Ping Yao and De'An Sun, EM Jan. 00, p112-119.

# **AUTHOR INDEX**

Achenbach, J. D. see Moran, B., EM July 00, p684-692

Adhikari, Sondipon

Adhikari, Sondipon Modal Analysis of Linear Asymmetric Nonconservative Systems, EM Dec. 99, p1372-1379 err: EM Feb. 00, p223 disc: Donald L. Cronin, EM Dec. 00, p1307

EM Dec. 00, p1307-1308 Dynamics of Stochastically Parameter

Transient Dynamics of Stochastically Parametered Beams, with C. S. Manohar, EM Nov. 00, p1131-1140 Adley Mark D.

Adley, Mark D.
see Bažant, Zdeněk, EM Sept. 00, p944-953
see Bažant, Zdeněk P., EM Sept. 00, p962-970
see Bažant, Zdeněk P., EM Sept. 00, p971-980

Ahmed, Ferdous

Observations on Flow around Bridge Abutment, with N. Rajaratnam, EM Jan. 00, p51-59

Three-Dimensional Mean Velocity Analysis of a 30 Degree Bend Flow, EM Dec. 00, p1 262-1272

Akers, Stephen A.

see Bažant, Zdeněk, EM Sept. 00, p944-953 see Bažant, Zdeněk P., EM Sept. 00, p962-970 see Bažant, Zdeněk P., EM Sept. 00, p971-980

Akl, Fred, P.E. see Omara, Abdel-Aziz M., P.E., EM Apr. 00, p381-388

Aktan, A. E. Issues in Infrastructure Health Monitoring for Manage-ment, with F. N. Cathas, K. A. Grimmelsman and C. J. Tsikos, EM July 00, p711-724

Aldea, Corina-Maria

see Shah, Surendra P., EM July 00, p754-760 Allam, Mehter Mohamed

see Keyhani, Ali, EM June 00, p620-625

Alves, M.

Material Constitutive Law for Large Strains and Strain Rates, EM Feb. 00, p215-218

Amde (formerly Amde M. Wolde-Tinsae), Amde M. see Ragavan. Vinasithamby, EM Oct. 99, p1164-1172

Ankireddi, Seshasayee Deterministic Control of Column under Horizontal-Vertical Excitation, with Henry T. Y. Yang, EM Apr. 00, p373-380

Aristizabal-Ochoa, J. Darío

Second-Order Axial Deflections of Imperfect 3D Beam-Column, EM Nov. 00, p1201-1208

General Carryover Matrix of Plane Rod Loaded Perpen-dicular to Its Plane, EM Aug. 00, p875-878

Asawa, G. L. see Sharekh, M. S. Abu, EM Apr. 00, p422-431

Au, F. T. K. see Zheng, D. Y., EM Nov. 00, p1141-1147

see Vanik, M. W., EM July 00, p738-745

Barpi, F.

Numerical Simulation of Prenotched Gravity Dam Mod-cls, with S. Valente, EM June 00, p611-619

Poro-Damage Approach Applied to Hydro-Fracture Analysis of Concrete, with Jean-Pierre Bournazel and Eric Bourdarot, EM Sept. 00, p937-943

Battaini, M. Bench-Scale Experiment for Structural Control, with G. Yang and B. F. Spencer, Jr., EM Feb. 00, p140-148

Characterization of Random Composites Using Moving-Window Technique, with L. L. Graham, EM Apr. 00, p389-397

Bažant, Zdeněk

Microplane Model M4 for Concrete. I: Formulation with Work-Conjugate Deviatoric Stress, with Ferhun C. Caner, Ignacio Carol, Mark D. Adley and Stephen A. Akers, EM Sept. 00, p944-953

Bažant, Zdeněk P.

Bazant, Zdenek F. Fracture Mechanies of ASR in Concretes with Waste Glass Particles of Different Sizes, with Goangseup Zi and Christian Meyer. EM Mar. 00, p226-232 Fracturing Rate Effect and Creep in Microplane Model for Dynamics, with Ferhun C. Caner, Mark D. Adley and Stephen A. Akers, EM Sept. 00, p962-970

Large-Strain Generalization of Microplane Model for Concrete and Application, with Mark D. Adley, Igna-cio Carol, Milan Jirásek, Stephen A. Akers, Bob Rohani, J. Donald Cargile and Ferhun C. Caner, EM Sept. 00, p971-980

Sept. 00, p971-980
Probabilistic Nonlocal Theory for Quasibrittle Fracture
Initiation and Size Effect. 1: Theory, with Drahomfr
Novák, EM Feb. 00, p166-174
Probabilistic Nonlocal Theory for Quasibrittle Fracture
Initiation and Size Effect. II: Application, with
Drahomfr Novák, EM Feb. 00, p175-185
Size Effect in Penetration of Sea Ice Plate with Part-

Through Cracks. 1: Theory, with Jang Jay H. Kim, EM Dec. 98, p1310-1315

Inrough Cracks. 1: Theory, with Jang Jay H. Kim, EM Dec. 98, p1310-1315 disc: J. P. Dempsey, EM Apr. 00, p438 Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. II: Results, with Jang Jay H. Kim, EM Dec. 98, p1316-1324 disc: J. P. Dempsey, EM Apr. 00, p438 disc: Devinder S. Sodhi, EM Apr. 00, p438 Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. I: Theory, with Jang Jay H. Kim, EM Dec. 98, p1310-1315 disc: Devinder S. Sodhi, EM Apr. 00, p438-440 clo: EM Apr. 00, p440-442 Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. II: Results, with Jang Jay H. Kim, EM Dec. 98, p1316-1324 clo: EM Apr. 00, p440-442 see Caner, Ferhun C., EM Sept. 00, p954-961

Beck, J. L. see Vanik, M. W., EM July 00, p738-745

Bellégo, C. Le

Chemo-Mechanical Effects in Mortar Beams Subjected to Water Hydrolysis, with B. Gérard and G. Pijaudier-Cabot, EM Mar. 00, p266-272

Belytschko, Ted

see Schwer, Leonard E., EM May 00, p443-454

Bergman, L. A. see Yang, B., EM May 00, p462-469

Berry, P. A.

Compression Tests on Cylinders with Circumferential Weld Depressions, with J. M. Rotter and R. Q. Bridge, EM Apr. 00, p405-413

Biswas, G.

see Saha, A. K., EM May 00, p523-532

Bourdarot, Eric see Bary, Benoît, EM Sept. 00, p937-943

Bournazel, Jean-Pierre

see Bary, Benoît, EM Sept. 00, p937-943

Boutros, M. K.

Elastic-Plastic Model of Pinned Beams Subjected to Impulsive Loading, EM Sept. 00, p920-927

Bridge, R. Q.

see Berry, P. A., EM Apr. 00, p405-413

Brown, Colin B.

David G. Elms, Mark T. Hanson, Khashayar Nikzad and R. Elaine Worden, EM June 00, p605-610 Entropy and Granular Materials: Model, EM June 00, p599-604

Byrd, Ryan A. see Mostaghel, Naser, EM June 00, p588-598

Analytical Solution for Plane Trusses with Equidistant Supports, with H. C. Chan and J. K. Liu, EM Apr. 00, p333-339

see Chan, H. C., EM May 00, p480-487

Caner, Ferhun C.
Microplane Model M4 for Concrete. II: Algorithm and
Calibration, with Zdeněk P. Bažant, EM Sept. 00, p954-961

pr34-901 see Bažant, Zdeněk, EM Sept. 00, p944-953 see Bažant, Zdeněk P., EM Sept. 00, p962-970 see Bažant, Zdeněk P., EM Sept. 00, p971-980

Cao, Yinghong Simulation of Stochastic Wind Velocity Field on Long-Span Bridges, with Haifan Xiang and Ying Zhou, EM Jan. 00, p1-6

Capecchi, Danilo

estroni, Fabrizio, EM July 00, p761-768

Cargile, J. Donald

see Bažant, Zdeněk P., EM Sept. 00, p971-980

Carol, Ignacio

see Bažant, Zdeněk, EM Sept. 00, p944-953 see Bažant, Zdeněk P., EM Sept. 00, p971-980

Cathas, F. N. see Aktan, A. E., EM July 00, p711-724

Caughey, T. K. see Masri, S. F., EM July 00, p666-676

Cha, Philip D. Updating Structural System Parameters Using Frequency Response Data, with James P. Tuck-Lee, EM Dec. 00.

Chan, H. C. Exact Static Solution of Grillwork with Periodic Sup-ports, with C. W. Cai and J. K. Liu, EM May 00, p480-487

see Cai, C. W., EM Apr. 00, p333-339

Chang, Shih-Po see Makris, Nicos, EM Feb. 00, p123-131

Chang, Sung-Pil

see Yeo, Inho, EM Apr. 00, p414-421

Chassiakos, A. G. see Masri, S. F., EM July 00, p666-676

Chen, Ching-Jen see Tsai, Whey-Fone, EM May 00, p470-479

Chen, HuaJun see Zhang, JinSuo, EM Oct. 00, p1040-1047

Chen, Hung-Liang "Roger"

Stiffness Evaluation and Damage Detection of Ceramic Candle Filters, with Alejandro C. Kiriakidis, EM Mar. 00, p308-319

Chen, Xinzhong

Chen, Anzhong Aerodynamic Coupling Effects on Flutter and Buffeting of Bridges, with Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p17-26 Time Domain Flutter and Buffeting Response Analysis of Bridges, with Masaru Matsumoto and Ahsan Kareem, EM Jan. 00, p7-16

Cheung, Y. K. see Zheng, D. Y., EM Nov. 00, p1141-1147

Choi, Chang-Koon

Choi, Chang-Koon
Weighted Integral SFEM Including Higher Order Terms.
with Hyuk-Chun Noh, EM Aug. 00, p859-866

Chwang, A. T. see Sahoo, T., EM Oct. 00, p1074-1082

Chwang, Allen T. see Yip, T. L., EM May 00, p533-538

Clarke, Murray J. see Teh, Lip H., EM Feb. 99, p248-251 see Teh, Lip H., EM Dec. 99, p1358-1364

Conway, Ted

se, Michel, EM June 00, p641-646

Corona, E. Asymmetric Collapse Modes of Pipes under Combined Bending and External Pressure, with S. Kyriakides, EM Dec. 00, p1232-1239

Coussy, Olivier see Mainguy, Marc, EM Mar. 00, p250-257 see Ulm, Franz-Josef, EM Mar. 00, p233-242

Croll, J. G. A. see Lokkas, P., EM Jan. 00, p84-92

Cronin, Donald L.

disc. (of Modal Analysis of Linear Asymmetric Noncon-servative Systems, by Sondipon Adhikari, EM Dec. 99, p1372-1379), EM Dec. 00, p1307

Daneshmand, Farhang

Finite-Element Analysis of Double-Free-Surface Flow through Slit in Dam, with Shailendra K. Sharan and Mohammad H. Kadivar, EM May 00, p515-522

Datta, T. K.

see Sarbjeet, S., EM Apr. 00, p340-347

Dempsey, J. P. disc. (of Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. I: Theory, by Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1310-1315), EM Apr. 00, p438

Apr. 00, p438 sc. (of Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks, II: Results, by Zdeněk P. Bažant and Jang Jay H. Kim. EM Dec. 98, p1316-1324), EM Apr. 00, p438

Torsional Surface Waves in Nonhomogeneous Aniso-tropic Medium under Initial Stress, with A. K. Gupta, S. Gupta and A. M. Prasad, EM Nov. 00, p1120-1123

Dinehart, David W.

Model for Dynamic Analysis of Wood Frame Shear Walls, with Harry W. Shenton, III, EM Sept. 00, p899-908

Doğruoğlu, Ali N.

Stability Analysis of Composite-Plate Foundation Inter-action by Mixed FEM, with Mehmet H. Omurtag, EM Sept. 00. p928-938

Dokun, Olajide D.

Ultrasonic Monitoring of Material Degradation in FRP Composites, with Laurence J. Jacobs and Rami M. Haj-Ali, EM July 00, p704-710

Dong, Stanley B.

disc. (of Buckling Analysis of Angle-Ply Multilaminated Long Hollow Cylinders, by Jianqiao Ye, EM Aug. 99, p964-969), EM Aug. 00, p887

Dyke, Shirley J. see Jansen, Laura M., EM Aug, 00, p795-803

see Young, D. L., EM Oct. 00, p1083-1092

Ellis, J. Hugh see Shi. Tinghui, EM July 00, p746-753

Elms, David G.

see Brown, Colin B., EM June 00, p605-610

El-Sayed, Sami

Delamination Buckling and Growth in Rings under Pressure, with Sriniyasan Sridharan, EM Oct. 00, p1033-

Fabrikant, V. I.

Two Tangential Forces and a Penny-Shaped Crack: a Complete Solution, EM Jan. 00, p102-111

Falk, Wayne M.

Unitateral Buckling Restrained by Initial Force Supports, with Sanjay Govindjee, EM Dec. 00, p1301-1302

New Light on Response of Linear Systems Subjected to Random Nonstationary Filtered Inputs, EM Dec. 00, p1273-1286

Feng, M. Q.

see Shinozuka, Masanobu, EM Dec. 00, p1224-1231

Feng, Maria Q.

Feng, Maria Q. Electromagnetic Image Reconstruction for Damage De-tection, with Ce Liu, Xiangmin He and Masanobu Shi-nozuka, EM July 00, p725-729 see Shinozuka, Masanobu, EM Dec. 00, p1287-1295

Multicomponent Model of Reinforced Concrete Joints for Cyclic Loading, with J.-M. Reynouard and O. Mera-bet, EM Aug. 00, p804-811

Frangopol, Dan M. see Xi, Yunping, EM Mar. 00, p258-265

Frostig, Yeoshua see Sheinman, Izhak, EM Nov. 00, p1148-1155

Gattulli, Vincenzo

Integrated Procedure for Identification and Control of MDOF Structures, with Francesco Romeo, EM July 00, p730-737

Gérard, B.

ge Bellégo, C. Le, EM Mar. 00, p266-272

Gerlach, Charles

see Schwer, Leonard E., EM May 00, p443-454

Gervais, Y.

see Mariaux, G., EM Nov. 00, p1180-1188

Ghanem, Roger Editorial, with Stein Sture, EM July 00, p665 see Shinozuka, Masanobu, EM July 00, p769-777

Gioffrè, Massimiliano

Wind-Induced Peak Bending Moments in Low-Rise Building Frames, with Mircea Grigoriu, Michael Kasperski and Emil Simiu, EM Aug. 00, p879-881

Govindjee, Sanjay see Falk, Wayne M., EM Dec. 00, p1301-1302

Graham, L. L. see Baxter, S. C., EM Apr. 00, p389-397

Grigoriu, Mircea

see Gioffrè, Massimiliano, EM Aug. 00, p879-881

Grimmelsman, K. A.

see Aktan, A. E., EM July 00, p711-724

Guice, Leslie K., P.E.

see Omara, Abdel-Aziz M., P.E., EM Apr. 00, p381-388

Gupta, A. K. see Dey, S., EM Nov. 00, p1120-1123

Gupta, S.

see Dey, S., EM Nov. 00, p1120-1123

Gustafsson, Per Johan see Nyman, Ulf. EM Dec. 00, p1209-1215

Haj-Ali, Rami M.

see Dokun, Olajide D., EM July 00, p704-710

Han, Dajian

see Su, Cheng, EM Oct. 00, p1057-1063

Hanson, Mark T. see Brown, Colin B., EM June 00, p605-610

Hasebe, Norio

Green's Functions of Think Plate Bending Problem under Fixed Boundary, with Xian-Feng Wang, EM Feb. 00,

see Wang, Xian-Feng, EM Aug. 00, p787-794

He, Xiangmin see Feng, Maria Q., EM July 00, p725-729

Hellmich, Christian

Modeling of Early-Age Creep of Shotcrete. II: Applica-tion to Tunneling, with Jérôme Sercombe, Franz-Josef Ulm and Herbert Mang, EM Mar. 00, p292-299 see Sercombe, Jérôme, EM Mar. 00, p284-291

Her. B. C.

see Young, D. L., EM Oct. 00, p1083-1092

Heredia-Zavoni, E.

Conditional Simulation of a Class of Nonstationary Space-Time Random Fields, with S. Santa-Cruz, EM Apr. 00, p398-404

Hirashima, Ken-ichi

see Iwase, Toshiaki, EM Feb. 6.), p149-156

Hjelmstad, K. D.

Analysis and Implementation of Resilient Modulus Mod-els for Granular Solids, with E. Taciroglu, EM Aug. 00, p821-830

Hoo Fatt, Michelle S.

Plastic Deformations of Impulsively Loaded, Rigid-Plastic Beams, with Yi Liu and Z. Brandon Wang, EM Feb. 00, p157-165

Hoshiya, Masaru

see Matsubara, Katsumi, EM Jan. 00, p76-83

Wavelet-Based Approach for Structural Damage Detec-tion, with M. Noori and R. St. Amand, EM July 00,

Houshmand, Bijan see Shinozuka, Masanobu, EM July 00, p769-777

Hsieh, P. C.

Dynamic Response of Soft Poroelastic Bed to Nonlinear Water Wave— Boundary Layer Correction Approach, with L. H. Huang and T. W. Wang, EM Oct. 00, p1064-1073

Hsu, Chin-Tsau LES and RANS Studies of Oscillating Flows over Flat Plate, with Xiyun Lu and Man-Kim Kwan, EM Feb. 00, p186-190

Hu, Hai-Chang see Liu, Zhong-Sheng, EM June 00, p559-564

Hua, Li

see Lam, Khin-Yong, EM Nov. 00, p1156-1162

Huang, Cheng see Liu, Zhong-Sheng, EM June 00, p559-564

Huang, Chih-Chieh see Loh, Chin-Hsiung, EM July 00, p693-703

Huang, L. H. see Hsieh, P. C., EM Oct. 00, p1064-1073 see Song, C. H., EM Apr. 00, p358-366

Hung, Shih-Lin Active Pulse Structural Control Using Artificial Neural Networks, with C. Y. Kao and J. C. Lee, EM Aug. 00, p839-849

Hunter, N. F. see Masri, S. F., EM July 00, p666-676

Hwu, Tzong-Yih

Stretches of Fluid Materials for Stokes Flows in Circular Cavity, EM May 00, p554-557

High-Accuracy Analysis of Beams of Bimodulus Materials, with Ken-ichi Hirashima, EM Feb. 00, p149-156

1333

Izzuddin, B. A.

disc. (of Symmetry of Tangent Stiffness Matrices of 3D Elastic Frame, by Lip H. Teh and Murray J. Clarke, EM Feb. 99, p248-251), EM June 00, p662-663

see Sathikh, S., EM Feb. 00, p132-139

Jacobs, Laurence J.

Jacobs, Laurence J. Effect of Aggregate Size on Attenuation of Rayleigh Surface Waves in Cement-Based Materials, with Joseph O. Owino, EM Nov. 00, p1124-1130
see Dokun, Olajide D., EM July 00, p704-710

Jansen, Laura M.

emiactive Control Strategies for MR Dampers: Compar-ative Study, with Shirley J. Dyke, EM Aug. 00, p795-803

Jayakumar

see Sathikh, S., EM Feb. 00, p132-139

Jeng, D. S.

Response of Inhomogeneous Seabed around Buried Pipe-line under Ocean Waves, with Y. S. Lin, EM Apr. 00, p321-332

Jia. Y.

see Li, Hong-Nan, EM Dec. 00, p1303-1305

Jirásek, Milan see Bažant, Zdeněk P., EM Sept. 00, p971-980

Joghataie, Abdolreza

Designing a General Neurocontroller for Water Towers, with Ardalan Vahidi, EM June 00, p582-587

Jones, Nicholas P.

see Shi, Tinghui, EM July 00, p746-753

Jung, Hyung-Jo see Kim, Ju-Tae, EM Feb. 00, p201-205

Kadivar, Mohammad H. see Daneshmand, Farhang, EM May 00, p515-522

Kam, T. Y.

see Lin, S. C., EM Aug. 00, p812-820

Kang, Hong D. Performance Evaluation of Elastoviscoplastic Concrete Model, with Kaspar J. William, EM Sept. 00, p995-

see Hung, Shih-Lin, EM Aug. 00, p839-849

Kareem, Ahsan see Chen, Xinzhong, EM Jan. 00, p7-16 see Chen, Xinzhong, EM Jan. 00, p17-26

Karr, Dale G., P.E. see Schade, Derek T., EM Sept. 00, p981-985

Kasperski, Michael

see Gioffrè, Massimiliano, EM Aug. 00, p879-881

Katopodes, Nikolaos D. see Sanders, Brett F., EM Sept. 00, p909-919

Kausel, Eduardo

see Tadeu. António J. B., EM Oct. 00, p1093-1097

Kefei, Li

see Ulm, Franz-Josef, EM Mar. 00, p233-242

Closed Loop Predictive Optimal Control Algorithm Using ARMA Models, with Mehter Mohamed Allam, EM June 00, p620-625

Kim, Ho-Kyung see Shinozuka, Masanobu, EM Dec. 00, p1287-1295

Kim, Jang Jay H. see Bažant, Zdeněk P., EM Dec. 98, p1310-1315 see Bažant, Zdeněk P., EM Dec. 98, p1316-1324

Optimal Structural Control Using Neural Networks, with Hyung-Jo Jung and In-Won Lee, EM Feb. 00, p201-

Kim, Moon-Young Spatial Stability of Nonsymmetric Thin-Walled Curved Spatial Stability of Nonsymmetric Tinn-Walled Cirved Beams. I: Analytical Approach, with Byoung-Cheol Min and Myung-Won Suh, EM May 00, p497-505 Spatial Stability of Nonsymmetric Thin-Walled Curved Beams. II: Numerical Approach, with Byoung-Cheol Min and Myung-Won Suh, EM May 00, p506-514

Kim, Sang-Hoon see Shinozuka, Masanobu, EM Dec. 00, p1287-1295

Kiriakidis, Alejandro C.

see Chen, Hung-Liang "Roger", EM Mar. 00, p308-319

Kirkegaard, P. H.

Ko, J. M. see Zhu, W. Q., EM Oct. 00, p1027-1032

Krawczuk, M. see Rytter, A., EM Jan. 00, p60-65

Kulatilake, P. H. S. W.

Effect of Block Size and Joint Geometry on Jointed Rock Hydraulics and REV, with Bibhuti B. Panda, EM Aug. 00, p850-858

Kuo, Chia-Chen

see Tsai, Whey-Fone, EM May 00, p470-479

Kwan, Man-Kim

see Hsu, Chin-Tsau, EM Feb. 00, p186-190

Kyriakides, S. see Corona, E., EM Dec. 00, p1232-1239

Frictional Dissipation in Axially Loaded Simple Straight Strands, with Anne Nawrocki and Ted Conway, EM June 00, p641-646

Lam, Khin-Yong

Generalized Differential Quadrature for Frequency of Rotating Multilayered Conical Shell, with Li Hua, EM Nov. 00, p1156-1162

Langley, R. S.

Unified Approach to Probabilistic and Possibilistic Anal-ysis of Uncertain Systems, EM Nov. 00, p1163-1172

Larive, Catherine

see Ulm, Franz-Josef, EM Mar. 00, p233-242

see Shi, Z. Y., EM June 00, p656-660 see Shi, Z. Y., EM Nov. 00, p1173-1179 see Shi, Z. Y., EM Dec. 00, p1216-1223

Lee, Hae Sung see Yeo, Inho, EM Apr. 00, p414-421

Lee, In-Won see Kim, Ju-Tae, EM Feb. 00, p201-205

Lee, J. C. see Hung, Shih-Lin, EM Aug. 00, p839-849

Lee, Jaehyung Numerical Simulation of Advected Thermal Using Gaussian-Vortex Model, with Il Won Seo, EM Oct. 00, p1098-1106

Lee, Jongheon

see Shinozuka, Masanobu, EM Dec. 00, p1224-1231

Lee, Kwan-Hee

lam, Moon-Hee, EM Dec. 00, p1257-1261

Lee, M. M. see Sahoo, T., EM Oct. 00, p1074-1082

Lee, Tim-Hau

see Tsai, Whey-Fone, EM May 00, p470-479

Leung, Christopher

Cabot and Sture Stine, EM Mar. 00, p225

Leung, Christopher K. Y. Debonding and Calibration Shift of Optical Fiber Sensors in Concrete, with Xinyang Wang and Noah Olson, EM Mar. 00, p300-307

Li, Faming

see Li, Zongjin, EM Feb. 00, p194-200

Simulation of Dynamic Liquid Pressure for Tuned Liquid Damper, with Y. Jia and Jing Lu, EM Dec. 00, p1303-1305

Li, Q. S.

uo, Q. Z., EM Oct. 00, p1111-1114

Li, Victor C, see Zhang, Jun, EM Dec. 00, p1297-1300

Li, Xiang-Song see Li, Zongjin, EM Feb. 00, p194-200

Li, Zongjin

P-Wave Arrival Determination and AE Characterization of Concrete, with Faming Li, Xiang-Song Li and Wenlong Yang, EM Feb. 00, p194-200

Li, Zongjing

Alkali-Silica Reaction of Concretes with Admixtures of Concrete, with Bin Mu and Jun Peng, EM Mar. 00, p243-249

Liang, Shin-Jye see Tsai, Whey-Fone, EM May 00, p470-479

Lim, G. T. see Wang, C. M., EM Apr. 00, p367-372

Lin, Chi-Ying see Loh, Chin-Hsiung, EM July 00, p693-703

Lin S.C.

Probabilistic Failure Analysis of Transversely Loaded Laminated Composite Plates Using First-Order Second Moment Method, with T. Y. Kam, EM Aug. 00, p812-820

Lin, Y. S.

see Jeng, D. S., EM Apr. 00, p321-332

Lin. Ce

see Feng, Maria O., EM July 00, p725-729

Liu, J. K. see Cai, C. W., EM Apr. 00, p333-339 see Chan, H. C., EM May 00, p480-487

see Hoo Fatt, Michelle S., EM Feb. 00, p157-165

Liu, Zhong-Sheng Derivative of Buckling Load with Respect to Support Lo-cations, with Hai-Chang Hu and Cheng Huang, EM June 00, p559-564

Lo, Jyh-Yeuan see Wu, Chih-Ping, EM Aug. 00, p882-885

Loh, Chin-Hsiung

Structural Identification of Frames under Earthquake Loading—Time Domain Identification Algorithms, with Chi-Ying Lin and Chih-Chieh Huang, EM July 00, p693-703

Theory of Combined Sway and Nonsway Frames Buck-ling, with J. G. A. Croll, EM Jan. 00, p84-92

Long, Z. F. see Soh, A. K., EM Nov. 00, p1115-1119

Losada, Iñigo J. see Neves, Maria da Graça, EM Oct. 00, p1048-1056

Losada, Miguel A.

see Neves, Maria da Graça, EM Oct. 00, p1048-1056

Lu, Jing see Li, Hong-Nan, EM Dec. 00, p1303-1305 Lu, Xiyun see Hsu, Chin-Tsau, EM Feb. 00, p186-190

Luo, Q. Z. Shear Lag of Thin-Walled Curved Box Girder Bridges, with Q. S. Li, EM Oct. 00, p1111-1114

Propagation Fronts During Calcium Leaching and Chloride Penetration, with Olivier Coussy, EM Mar. 00, p250-257 Mainguy, Marc

Makris, Nicos Response of Damped Oscillators to Cycloidal Pulses, with Shih-Po Chang, EM Feb. 00, p123-131

Mang, Herbert

see Hellmich, Christian, EM Mar. 00, p292-299 see Sercombe, Jérôme, EM Mar. 00, p284-291

Manohar, C. S. see Adhikari, Sondipon, EM Nov. 00, p1131-1140

Manolis, George D.

Boundary Integral Equations for Solids and Fluids by Marc Bonnet, EM Jan. 00, p120-121

Mansouri, Babak

see Shinozuka, Masanobu, EM July 00, p769-777

Transient Behavior of Complex Aeraulic or Hydraulic Networks Including Centrifugal Fans or Pumps, with Y. Gervais, EM Nov. 00, p1180-1188

Marwala, Tshilidzi

Damage Identification Using Committee of Neural Net-works, EM Jan. 00, p43-50

Masri, S. F.

Application of Neural Networks for Detection of Changes in Nonlinear Systems, with A. W. Smyth, A. G. Chassiakos, T. K. Caughey and N. F. Hunter, EM July

Matsubara, Katsumi

Soil Spring Constants of Buried Pipelines for Seismic Design, with Masaru Hoshiya, EM Jan. 00, p76-83

Matsumoto, Masaru

see Chen, Xinzhong, EM Jan. 00, p7-16 see Chen, Xinzhong, EM Jan. 00, p17-26

Matsunaga, Hiroyuki

Vibration and Stability of Thick Plates on Elastic Foun-dations, EM Jan. 00, p27-34

Solution of Circular Sandwich Ring under Two Forces Acting along Diameter, with X. Tao, EM Apr. 00, p348-357

Merabet O

see Fleury, F., EM Aug. 00, p804-811

Meyer, Christian see Bažant, Zdeněk P., EM Mar. 00, p226-232

Micaletti, R. C.

irect Generation of Non-Gaussian Weighted Integrals, EM Jan. 00, p66-75

Min, Byoung-Cheol

see Kim, Moon-Young, EM May 00, p497-505 see Kim, Moon-Young, EM May 00, p506-514

Limit-State Surface Element Method: Application to Fa-tigue Reliability with NDE Inspections, with Y. Xu and J. D. Achenbach, EM July 00, p684-692

Mostaghel, Naser

Analytical Description of Multidegree Bilinear Hysteretic System, with Ryan A. Byrd, EM June 00, p588-598

see Li, Zongjing, EM Mar. 00, p243-249 Muralidhar, K. see Saha, A. K., EM May 00, p523-532

Naaman, A. E. see Sujivorakul, C., EM Sept. 00, p986-993

Naboulsi, S. K.

Thermodynamic Damage Model for Composite Under Severe Loading, with A. N. Palazotto, EM Oct. 00, p1001-1011

Naganuma, Toshihilo see Shinozuka, Masanobu, EM Dec. 00, p1224-1231

Nam, Moon-Hee Unsymmetrically Loaded Cylindrical Tank on Elastic Foundation, with Kwan-Hee Lee, EM Dec. 00, p1257-

Nath, Y.

see Shukla, K. K., EM Aug. 00, p831-838

Nawrocki, Anne see Labrosse, Michel, EM June 00, p641-646 Neves, Maria da Graça

Neves, sharta dia Graça Short-Wave and Wave Group Scattering by Submerged Porous Plate, with Inigo J. Losada and Miguel A. Lo-sada, EM Oct. 00, p1048-1056 Ng, Chiu-On Dispersion in Sediment-Laden Stream Flow, EM Aug. 00, p779-786

Ni, Y. Q. see Zhu, W. Q., EM Oct. 00, p1027-1032

Nikzad, Khashayar see Brown, Colin B., EM June 00, p605-610

Noh, Hyuk-Chun see Choi, Chang-Koon, EM Aug. 00, p859-866

see Hou. Z., EM July 00, p677-683

Nosier, Asghar Study of Edge-Zone Equation of Mindlin-Reissner Plate Theory, with Arash Yavari and Shahram Sarkani, EM June 00, p647-651

Novák, Drahomír see Bažant, Zdeněk P., EM Feb. 00, p166-174 see Bažant, Zdeněk P., EM Feb. 00, p175-185

Nyman, Ulf

Buckling of Long Orthotropic Plates Including Higher-Order Transverse Shear, with Per Johan Gustafsson, EM Dec. 00, p1209-1215

Oditt, Kevin see Schade, Derek T., EM Sept. 00, p981-985

Olson, Noah

see Leung, Christopher K. Y., EM Mar. 00, p300-307

Omara, Abdel-Aziz M., P.E. Offiana, Adder-Azz M., F.E., Instability of Thin Pipes Encased in Oval Rigid Cavity, with Leslie K. Guice, P.E., W. Thomas Straughan, P.E., and Fred Akl, P.E., EM Apr. 00, p381-388

Omurtag, Mehmet H. see Doğruoğlu, Ali N., EM Sept. 00, p928-938

O'Neil, Edward F.

see Subramaniam, Kolluru V., EM Sept. 00, p891-898 Ono, Tetsuro see Zhao, Yan-Gang, EM Apr. 00, p433-436

Oshita, Hideki Modeling of Water Migration Phenomenon in Concrete as Homogeneous Material, with Tada-aki Tanabe, EM May 00, p551-553

Water Migration Phenomenon in Concrete in Postpeak Region, with Tada-aki Tanabe, EM June 00, p573-581 Water Migration Phenomenon in Concrete in Prepeak Region, with Tada-aki Tanabe, EM June 00, p565-572 Water Migration Phenomenon Model in Cracked Con-crete, II: Calibration, with Tada-aki Tanabe, EM May 00, p544-549

Water Migration Phenomenon Model in Cracked Concrete. I: Formulation, with Tada-aki Tanabe, EM May 00, p539-543

Owino, Joseph O.

see Jacobs, Laurence J., EM Nov. 00, p1124-1130

Palazotto, A. N. see Naboulsi, S. K., EM Oct. 00, p1001-1011

Panda, Bibhuti B. see Kulatilake, P. H. S. W., EM Aug. 00, p850-858

Pathak, S. K. see Sharekh, M. S. Abu, EM Apr. 00, p422-431

Axisymmetric Wrinkling of Cylinders with Finite Strain, EM May 00, p455-461

Peng, Jun see Li, Zongjing, EM Mar. 00, p243-249

Pijaudier-Cabot, G. see Bellégo, C. Le, EM Mar. 00, p266-272

Pijaudier-Cabot, Gilles

see Leung, Christopher, EM Mar. 00, p225

Popovics, John S. see Shah, Surendra P., EM July 00, p754-760 see Subramaniam, Kolluru V., EM Sept. 00, p891-898

see Sharekh, M. S. Abu, EM Apr. 00, p422-431

Prasad, A. M. see Dey, S., EM Nov. 00, p1120-1123

Pratap, R. see Reddy, C. K., EM Nov. 00, p1189-1196

Ragavan, Vinasithamby

Ragavan, Vinasithamby
Nonlinear Buckling and Postbuckling of Cable-Stiffened
Prestressed Domes, with Amde M. Amde (formerly
Amde M. Wolde-Tinsae), EM Oct. 99, p1164-1172
dise: Robert Schmidt, EM Dec. 00, p1308
clo: EM Dec. 00, p1308-1309

Rajaratnam, N. see Ahmed, Ferdous, EM Jan. 00, p51-59

Rajasekaran, S. see Sathikh, S., EM Feb. 00, p132-139

Equivalent Viscous Damping for Bilinear Hysteretic Os-cillator, with R. Pratap, EM Nov. 00, p1189-1196

Reinhorn, Andrei M.

see Sivaselvan, Mettupalayam V., EM June 00, p633-640

Reynouard, J.-M. see Fleury, F., EM Aug. 00, p804-811

Rohani, Bob see Bažant, Zdeněk P., EM Sept. 00, p971-980

Romeo, Francesco

see Gattulli, Vincenzo, EM July 00, p730-737

Rotter, J. M. see Berry, P. A., EM Apr. 00, p405-413

Ryttar, A.

Experimental and Numerical Study of Damaged Cantilever, with M. Krawczuk and P. H. Kirkegaard, EM Jan.

Transition and Chaos in Two-Dimensional Flow Past a Square Cylinder, with K. Muralidhar and G. Biswas, EM May 00, p523-532

Structures, with M. M. Lee and A. T. Chwang, EM Oct. 00, p1074-1082

Sanders, Brett F.

Adjoint Sensitivity Analysis for Shallow-Water Wave Control, with Nikolaos D. Katopodes, EM Sept. 00, p909-919

Santa-Cruz, S. see Heredia-Zavoni, E., EM Apr. 00, p398-404

Sarbjeet, S. Nonlinear Sliding Mode Control of Seismic Response of Building Frames, with T. K. Datta, EM Apr. 00, p340-

Sarkani, Shahram see Nosier, Asghar, EM June 00, p647-651

Sathikh, S.

General Thin Rod Model for Preslip Bending Response of Strand, with S. Rajasekaran, Jayakumar and C. Jaberaj, EM Feb. 00, p132-139

Schade, Derek T.

Thermoelastic Stability of Two Bonded Half Planes, with Kevin Oditt and Dale G. Karr, P.E., EM Sept. 00, p981-985

Schmidt, Robert

Schmidt, Kobert disc. (of Nonlinear Buckling and Postbuckling of Cable-Stiffened Prestressed Domes, by Vinasithamby Raga-van and Amde M. Amde (formerly Amde M. Wolde-Tinsae), EM Oct. 99, p1164–1172), EM Dec. 00, p1308

Schuëller, G. I. see Vasta, M., EM June 00, p626-632

Schwer, Leonard E.

Element-Free Galerkin Simulations of Concrete Failure in Dynamic Uniaxial Tension Test, with Charles Ger-lach and Ted Belytschko, EM May 00, p443-454

Seo, Il Won see Lee, Jachyung, EM Oct. 00, p1098-1106

Sercombe, Jérôme

Sercombe, Jerombe, Jerombe, Jerombe, Jerombe, Jerombe, Jerombe, Jerombe, Modeling of Early-Age Creep of Shotcrete. I: Model and Model Parameters, with Christian Hellmich, Franz-Josef Ulm and Herbert Mang, EM Mar. 00, p284-291 see Hellmich, Christian, EM Mar. 00, p292-299

Shah, Surendra P.

Shah, Surendra P.
New Directions in Concrete Health Monitoring Technology, with John S. Popovics, Kolluru V. Subramaniam and Corina-Maria Aldea, EM July 00, p754-760
see Subramaniam, Kolluru V., EM Sept. 00, p891-898
see Weiss, W. Jason, EM Jan. 00, p93-101

see Yang, Wei, EM Jan. 00, p35-42 see Yoon, Dong-Jin, EM Mar. 00, p273-283

Sharan, Shailendra K.

see Daneshmand, Farhang, EM May 00, p515-522

Sharekh, M. S. Abu Turbulent Boundary Layer over Symmetric Bodies with Rigid and Flexible Surfaces, with S. K. Pathak, G. L. Asawa and P. D. Porey, EM Apr. 00, p422-431

Buckling of Delaminated Composite Beams with Shear Deformation Effect, with Yeoshua Frostig, EM Nov. 00, p1148-1155

Shen, Hui-Shen

Thermal Postbuckling of Preloaded Shear Deformable Laminated Plates, EM May 00, p488-496

Shenton, Harry W., III

see Dinehart, David W., EM Sept. 00, p899-908

Shi, Tinghui

Simultaneous Estimation of System and Input Parameters from Output Measurements, with Nicholas P. Jones and J. Hugh Ellis, EM July 00, p746-753

Damage Localization by Directly Using Incomplete Mode Shapes, with S. S. Law and L. M. Zhang, EM June 00, p656-660

Optimum Sensor Placement for Structural Damage Detection, with S. S. Law and L. M. Zhang, EM Nov. 00, p1173-1179

Structural Damage Detection from Modal Strain Energy Change, with S. S. Law and L. M. Zhang, EM Dec. 00, p1216-1223

Shin, Soobong see Yeo, Inho, EM Apr. 00, p414-421

Shinozuka, Masanobu

Damage Detection in Urban Areas by SAR Imagery, with Roger Ghanem, Bijan Houshmand and Babak Man-

Roger Ghanem, Bijan Houshmand and Babak Mansouri, EM July 00, p769-777
Nonlinear Static Procedure for Fragility Curve Development, with Maria Q. Feng, Ho-Kyung Kim and Sang-Hoon Kim, EM Dec. 00, p1287-1295
Statistical Analysis of Fragility Curves, with M. Q. Feng, Jongheon Lee and Toshihilo Naganuma, EM Dec. 00, p1224-1231

see Feng, Maria Q., EM July 00, p725-729

Shukla, K. K.

Nonlinear Analysis of Moderately Thick Laminated Rec-tangular Plates, with Y. Nath, EM Aug. 00, p831-838

Simiu, Emil see Gioffrè, Massimiliano, EM Aug. 00, p879-881

Sivaselvan, Mettupalayam V.

Hysteretic Models for Deteriorating Inelastic Structures, with Andrei M. Reinhorn, EM June 00, p633-640

Smyth, A. W. see Masri, S. F., EM July 00, p666-676

Sodhi, Devinder S.

disc. (of Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. II: Results, by Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1316–1324), EM

disc. (of Size Effect in Penetration of Sea Ice Plate with Part-Through Cracks. I: Theory, by Zdeněk P. Bažant and Jang Jay H. Kim, EM Dec. 98, p1310-1315), EM Apr. 00, p438-440

Soh, A. K.

Development of Four-Node Membrane Element Containing Central Circular Hole, with Z. F. Long, EM Nov. 00, p1115-1119

Laminar Poroelastic Media Flow, with L. H. Huang, EM Apr. 00, p358-366

Song, Chung R.

see Voyiadjis, George Z., EM Oct. 00, p1012-1019 see Voyiadjis, George Z., EM Oct. 00, p1020-1026

Pitfalls of Deterministic and Random Analyses of Systems with Hysteresis, with B. A. Zelden, EM Oct. 00, p1108-1110

Spencer, B. F., Jr. see Battaini, M., EM Feb. 00, p140-148

Sridharan, Srinivasan

Modeling Interactive Buckling of Plate Structures Using Special Elements, with Madjid Zeggane, EM Dec. 00, n1247-1256 see El-Sayed, Sami, EM Oct. 00, p1033-1039

St. Amand, R. see Hou, Z., EM July 00, p677-683

Stine, Sture

see Leung, Christopher, EM Mar. 00, p225

Straughan, W. Thomas, P.E.

see Omara, Abdel-Aziz M., P.E., EM Apr. 00, p381-388

Sture, Stein see Ghanem, Roger, EM July 00, p665

Su, Cheng

Multidomain SFBEM and Its Application in Elastic Plane Problems, with Dajian Han, EM Oct. 00, p1057-1063

Subramaniam, Kolluru V.

Crack Propagation in Flexural Fatigue of Concrete, with Edward F. O'Neil, John S. Popovics and Surendra P. Shah, EM Sept. 00, p891-898 see Shah, Surendra P., EM July 00, p754-760

Suh, Myung-Won

see Kim, Moon-Young, EM May 00, p497-505 see Kim, Moon-Young, EM May 00, p506-514

Sujivorakul, C.

Pullout Response of a Smooth Fiber with an End Anchorage, with A. M. Waas and A. E. Naaman, EM Sept. 00,

see Yao, Yang-Ping, EM Jan. 00, pl 12-119 Taciroglu, E.

see Hjelmstad, K. D., EM Aug. 00, p821-830

Tadeu, António J. B. Green's Functions for Two-and-a-Half-Dimensional Elastodynamic Problems, with Eduardo Kausel, EM Oct. 00, p1093-1097

Takewaki, Izuru

Semi-Explicit Random Response and Sensitivity of Sim-ple SSI System, EM Feb. 00, p219-222

Tan, C. A.

see Yang, B., EM May 00, p462-469

Tanabe, Tada-aki see Oshita, Hideki, EM May 00, p539-543 see Oshita, Hideki, EM May 00, p544-549 see Oshita, Hideki, EM May 00, p551-553 see Oshita, Hideki, EM June 00, p565-572

see Oshita, Hideki, EM June 00, p573-581

Tao, X. see Mau, S. T., EM Apr. 00, p348-357

Teh, Lip H.

Symmetry of Tangent Stiffness Matrices of 3D Elastic Frame, with Murray J. Clarke, EM Feb. 99, p248-251 disc: B. A. Izzuddin, EM June 00, p662-663 clo: EM June 00, p663-664

Tracing Secondary Equilibrium Paths of Elastic Framed Structures, with Murray J. Clarke, EM Dec. 99, p1358-1364

EM Aug. 00, p889 err:

Optimal Nonlinear Stochastic Control of Hysteretic Systems, with Z. G. Ying, Y. Q. Ni and J. M. Ko, EM Oct. 00, p1027-1032

Zi, Goangseup see Bažant, Zdeněk P., EM Mar. 00, p226-232

Zhu, W. Q.

Finite Analytic Model for Flow and Transport in Unsaturated Zone, with Tim-Hau Lee, Ching-Jen Chen, Shin-Jye Liang and Chia-Chen Kuo, EM May 00, p470-479

Tsikos, C. J.

see Aktan, A. E., EM July 00, p711-724

Tuck-Lee, James P. see Cha, Philip D., EM Dec. 00, p1240-1246

Ulm, Franz

see Leung, Christopher, EM Mar. 00, p225

Ulm, Franz-Josef

Ulm, Franz-Josef
Thermo-Chemo-Mechanics of ASR Expansion in Concrete Structures, with Olivier Coussy, Li Kefei and Catherine Larive, EM Mar. 00, p233-242.
see Hellmich, Christian, EM Mar. 00, p292-299.
see Sercombe, Jérôme, EM Mar. 00, p284-291.

Vahidi, Ardalan see Joghataie, Abdolreza, EM June 00, p582-587

Valente, S. see Barpi, F., EM June 00, p611-619

Vanik, M. W.

Bayesian Probabilistic Approach to Structural Health Monitoring, with J. L. Beck and S. K. Au, EM July 00, p738-745

Vasta, M.

Phase Space Reduction in Stochastic Dynamics, with G. I. Schuëller, EM June 00, p626-632

Vestroni, Fabrizio Damage Detection in Beam Structures Based on Fre-quency Measurements, with Danilo Capecchi, EM July (0), p761-768

Voyaidjis, George Z.
Grain Boundary Migration in Metals: Thermodynamics,
Kinetics, Applications by G. Gottstein and L. S.
Shvindlerman, EM Aug. 00, p888

Voyiadjis, George Z.

nite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. I: Theory, with Chung R. Song, EM Oct. 00, p1012-1019

Finite Strain, Anisotropic Modified Cam Clay Model with Plastic Spin. II: Application to Piezocone Test, with Chung R. Song, EM Oct. 00, p1020-1026

Waas, A. M. see Sujivorakul, C., EM Sept. 00, p986-993

Wang, C. M.

Bending Solutions of Sectorial Mindlin Plates from Kir-chhoff Plates, with G. T. Lim, EM Apr. 00, p367-372

O

Bridle Sling Lifting of Elastic Beam, EM Nov. 00, p1198-1200

Wang, T. W. see Hsieh, P. C., EM Oct. 00, p1064-1073

Wang, Xian-Feng Green's Function for Mixed Boundary Value Problem of Thin Plate, with Norio Hasebe, EM Aug. 00, p787-794 see Hasebe, Norio, EM Feb. 00, p206-213

Wang, Xinyang

see Leung, Christopher K. Y., EM Mar. 00, p300-307

Wang, Z. Brandon see Hoo Fatt, Michelle S., EM Feb. 00, p157-165

Weiss, W. Jason

Weiss, W. Jason Influence of Specimen Size/Geometry on Shrinkage Cracking of Rings, with Wei Yang and Surendra P. Shah, EM Jan. 00, p93-101 see Yang, Wei, EM Jan. 00, p35-42 see Yoon, Dong-Jin, EM Mar. 00, p273-283

William, Kaspar

see Xi, Yunping, EM Mar. 00, p258-265

William, Kaspar J. see Kang, Hong D., EM Sept. 00, p995-1000

Worden, R. Elaine see Brown, Colin B., EM June 00, p605-610

Three-Dimensional Elasticity Solutions of Laminated Annular Spherical Shells, with Jyh-Yeuan Lo, EM Aug. 00, p882-885

Wu, Cynthia see Zhang, Jun, EM Dec. 00, p1297-1300

Xi, Yunping

Multiscale Modeling of Interactive Diffusion Processes in Concrete, with Kaspar William and Dan M. Frango-pol, EM Mar. 00, p258-265 see Leung, Christopher, EM Mar. 00, p225

Viano, Haifan

see Cao, Yinghong, EM Jan. 00, p1-6

Xu, Y. see Moran, B., EM July 00, p684-692

Yang, B.

Direct Numerical Procedure for Solution of Moving Os-cillator Problems, with C. A. Tan and L. A. Bergman, EM May 00, p462-469

see Battaini, M., EM Feb. 00, p140-148

Yang, Henry T. Y. see Ankireddi, Seshasayee, EM Apr. 00, p373-380

Yang, Wei Predicting Shrinkage Stress Field in Concrete Slab on Elastic Subgrade, with W. Jason Weiss and Surendra P. Shah, EM Jan. 00, p35-42 see Weiss, W. Jason, EM Jan. 00, p93-101

Yang, Wenlong see Li, Zongjin, EM Feb. 00, p194-200

Yao, Yang-Ping Application of Lade's Criterion to Cam-Clay Model, with De'An Sun, EM Jan, 00, p112-119

Yavari, Arash see Nosier, Asghar, EM June 00, p647-651

Ye, Jianqiao

Ye, Jianquio Buckling Analysis of Angle-Ply Multilaminated Long Hollow Cylinders, EM Aug. 99, p964-969 disc: Stanley B. Dong, EM Aug. 00, p887 clo: EM Aug. 00, p887

Yeo, Inho
Statistical Damage Assessment of Framed Structures
from Static Responses, with Soobong Shin, Hae Sung
Lee and Sung-Pil Chang, EM Apr. 00, p414-421

Closed-Form Solution for Reinforced Timoshenko Beam on Elastic Foundation, EM Aug. 00, p868-874

Ying, Z. G. see Zhu, W. Q., EM Oct. 00, p1027-1032

Yip, T. L. Perforated Wall Breakwater with Internal Horizontal Plate, with Allen T. Chwang, EM May 00, p533-538

Yoon, Dong-Jin

Vising Damage in Corroded Reinforced Concrete
Using Acoustic Emission, with W. Jason Weiss and
Surendra P. Shah, EM Mar. 00, p273-283

Young, D. L.
BIEM Modeling of 3D Circulation and Transport in Stratified Estuaries, with B. C. Her and T. I. Eldho, EM Oct. 00, p1083-1092

Zeggane, Madjid see Sridharan, Srinivasan, EM Dec. 00, p1247-1256

Zelden, B. A. see Spanos, P. D., EM Oct. 00, p1108-1110

Zhang, BenZhao see Zhang, JinSuo, EM Oct. 00, p1040-1047

Zhang, Jianping see Zhou, You-He, EM June 00, p653-655

Zhang, JinSuo

Flow in Helical Annular Pipe, with BenZhao Zhang and HuaJun Chen, EM Oct. 00, p1040-1047

Zhang, Jun
Influence of Reinforcing Bars on Shrinkage Stresses in
Concrete Slabs, with Victor C. Li and Cynthia Wu,
EM Dec. 00, p1297-1300

ZHaug, L. M., See Shi, Z. Y., EM June 00, p656-660 see Shi, Z. Y., EM Nov. 00, p1173-1179 see Shi, Z. Y., EM Dec. 00, p1216-1223

Zhao, Yan-Gang New Point Estimates for Probability Moments, with Tet-suro Ono, EM Apr. 00, p433-436

ibration of Vehicle on Compressed Rail on Viscoelastic Foundation, with F. T. K. Au and Y. K. Cheung, EM Nov. 00, p1141-1147

Zheng, Xiao Jing see Zhou, You-He, EM June 00, p653-655

Zhou, Ying

see Cao, Yinghong, EM Jan. 00, p1-6

Zhou, You-He

Bending of Sector Plates on Elastic Foundations by Bes-sel Functions, with Jianping Zhang and Xiao Jing Zheng, EM June 00, p653-655

